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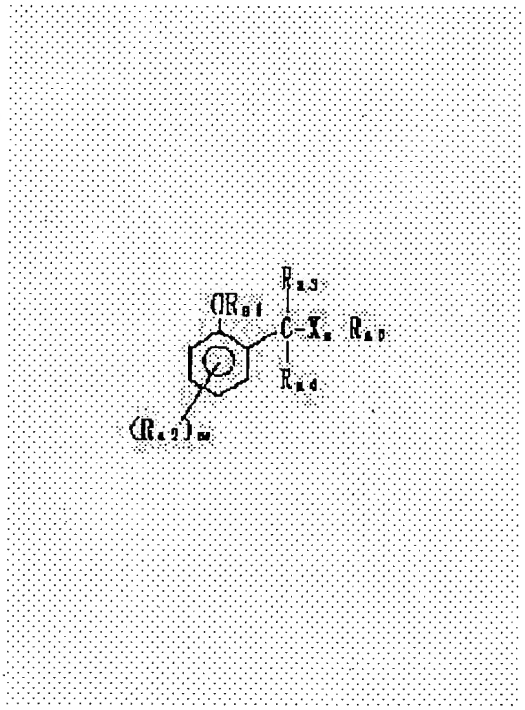
(54) SILVER HALIDE COLOR PHOTOGRAPHIC MATERIAL

(57)Abstract:



PURPOSE: To enable a silver halide color photographic material to form a color image that does not discolor over a long period and to have high preservability by containing a specific compound in a layer on a carrier.

CONSTITUTION: This silver halide color photographic material contains, in at least one layer on a carrier, at least one kind of compound represented by the formula. In the formula, Ra1 represents hydrogen atom, an aliphatic group, an acyl group, or an arylsulfonyl group; Ra2 represents hydrogen atom or a substituent; Ra3, Ra4 each represent hydrogen atom, an aliphatic group, or an aryl group; Ra5 represents an aliphatic group, an aryl group, an acyl group, an aryloxycarbonyl group, a carbamoyl group, an arylsulfonyl group, or a sulfamoyl group; Xa represents oxygen atom or sulfur atom; and (m) represents an integer from 1 to 4. That is, the compound represented by the formula is a compound for preventing the discoloring of a pigment image formed from a coupler and is not colored, so it does not substantially provide pigment when processed with a color developer.

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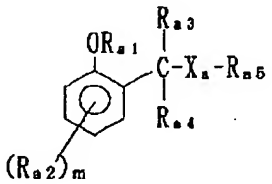
* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

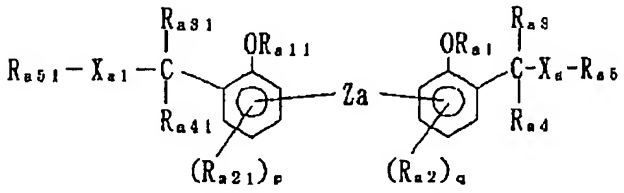
DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[Industrial Application] This invention relates to silver halide color sensitive material.
[0002]
[Description of the Prior Art] Silver halide color sensitive material has the silver halide emulsion layer generally exposed to red, green, and the blue three primary colors, and forms a color image with the approach which the relation of the color and the complementary color each layer feels three sorts of color couplers in each emulsion layer (coupler) is made to color, and the so-called subtractive color process. As for the color image acquired by carrying out photographic processing of this silver halide color sensitive material, what consists of azomethine coloring matter formed of the reaction of the oxide of an aromatic series primary amine color developing agent and a coupler or India aniline dye is common.
[0003] Thus, if the obtained color picture is not necessarily stable, and it exposes to light for a long period of time or it is saved under high-humidity/temperature to light or wet heat, it will cause fading and discoloration of a coloring matter image, and will cause degradation of an image. It is the fault which can be said that such fading and discoloration of an image are also fatal for a record ingredient. In order that the robustness of the coloring matter obtained may develop a high coupler, may use a fading inhibitor or may prevent image degradation by ultraviolet rays as an approach of removing these faults, the device of using an ultraviolet ray absorbent is proposed.
[0004] Especially, the image degradation prevention effectiveness by the fading inhibitor is large, for example, the ether which silanized, acylated or alkylated hydroquinone, hindered phenols, catechols, gallate, aminophenols, hindered amine, chromanol, indans, and the phenolic hydroxyl group of each of these compounds or ester, and adding a metal complex etc. further are known.
[0005] These compounds were insufficient in response to the demand of the customer who has come to search for advanced image quality, although the effectiveness as an inhibitor of a coloring matter image's fading or discoloration was accepted. And it was large, caused coloring (henceforth fogging) of the unexposed section, or coloring inhibition of a coupler was caused, and white coloring generated coloring matter in response to the time of the color development with the developing-agent oxidant, caused color muddiness, and these compounds had some which have a bad influence on the so-called photograph property, and were not enough. Furthermore, these compounds have some which produce a maldistribution or produce a microcrystal after emulsion spreading, and by the time they demonstrate the effectiveness which was synthetically excellent as an object for color photography, they will not have resulted. Moreover, the compound which has a chroman, coumarane structure, and its similar structure, or the compound which has bisphenol system structure is also image degradation **********. It was not what each of these compounds is insufficient for the strong demand to strong-izing of an image although the fading prevention effectiveness is demonstrated, and a white ground colors it yellow by the passage of time (yellow stain), or reacts with a developing-agent oxidant at the time of development, generates coloring matter, also has a thing leading to color muddiness, and

was excellent.
[0006]
[Problem(s) to be Solved by the Invention] A color picture does not discolor for a long period of time, but the first purpose of this invention has it in offering the sensitive material which has advanced shelf life. The second purpose of this invention is to offer the sensitive material which contains the additive for photographs with sufficient effectiveness for prevention of fading [of a color image], or discoloration, and a dispersant without not generating change or fogging of a hue, and not generating coloring matter in response to the time of development with a developing-agent oxidant moreover or producing the fall of coloring concentration. The third purpose of this invention is excellent in the solubility to a high-boiling point organic solvent, and is to offer the sensitive material containing an additive for photographs which has a bad influence neither on the color enhancement of a pigmentation coupler, nor other additives for photographs. The fourth purpose of this invention is to offer the sensitive material which has the advanced shelf life containing the additive for photographs which does not fade even if the coloring matter image produced by coloring of a pigmentation coupler carries out the passage of time for a long period of time, and does not cause the white coloring after the passage of time (yellow stain), either, and a dispersant.
[0007]
[Means for Solving the Problem] this invention persons found out at least that the purpose of this invention was attained by [of the compound expressed with the following general formula (A)] making a kind contain in silver halide color photography sensitive material, as a result of examining many things.
[0008]
[Formula 6]
一般式（A）



[0009] (Ra1 expresses a hydrogen atom, an aliphatic series radical, an acyl group, aliphatic series, or an aryl sulfonyl group among a formula.) Ra2 expresses a hydrogen atom or a substituent. Ra3 and Ra4 may be the same, or you may differ, and a hydrogen atom, an aliphatic series radical, or an aryl group is expressed, and Ra5 expresses an aliphatic series radical, an aryl group, an acyl group, aliphatic series or an aryloxy carbonyl group, a carbamoyl group, aliphatic series, an aryl sulfonyl group, or a sulfamoyl group, respectively. Xa Express a ****** atom or a sulfur atom. m expressed the integer of 1-4, and two or more Ra2 when m is two or more may be the same, or could differ, and when two or more Ra2 or more by two has m in each-other ortho position, it may be combined mutually. However, Ra1 and Ra5 are not combined mutually.
[0010] And that it is desirable that the compound expressed with a general formula (A) is a compound expressed with the following general formula (A-I) or the following general formula (A-II), [0011]
[Formula 7]
一般式（A－I）



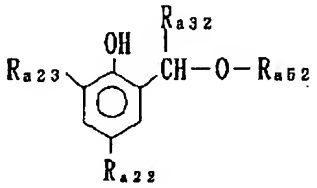
[0012] (Ra1, Ra2, Ra3, Ra4, Ra5, and Xa are the same as what the general formula (A) defined among a formula, and Ra11, Ra21, Ra31, Ra41, Ra51, and Xa1 are the same as what Ra1, Ra2, Ra3, Ra4, Ra5,

and Xa defined, respectively.) Za Expressing oxygen atom, sulfur atom, or -C(Ra6) (Ra7)-, p and q express the integer of 1-3. Ra6 and Ra7 may be the same, or they may differ from each other, and express a hydrogen atom, an aliphatic series radical, or an aryl group, respectively. Two or more Ra2 or Ra21 when p or q is two or more It may be the same or you may differ. Ra2 or Ra21 of plurality [q / p or / two / or more] When it is in each-other ortho position, you may join together mutually. However, Ra1, and Ra5 and Ra11 Ra51 It does not join together mutually.

[0013]

[Formula 8]

一般式（A－II）



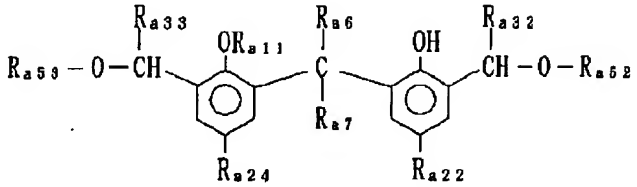
[0014] (Ra32 and Ra52 are synonymous with Ra3 and Ra5 in a general formula (A) respectively among a formula.) Ra22 And Ra23 It may be the same, or you may differ and it is synonymous with Ra2 in a general formula (A) respectively.

[0015] And it found the desirable thing that the compound expressed with a general formula (A) is especially a compound expressed with the following general formula (A-III).

[0016]

[Formula 9]

一般式（A－III）



[0017] (Ra11 is synonymous with Ra1 which the general formula (A) defined among a formula.) Ra32 And Ra33 It may be the same, or you may differ and it is synonymous with Ra3 in a general formula (A) respectively. Ra52 And Ra53 It may be the same, or you may differ and it is synonymous with Ra5 in a general formula (A) respectively. Ra22 And Ra24 It may be the same, or you may differ and it is synonymous with Ra2 in a general formula (A) respectively. Ra6 and Ra7 may be the same, or they may differ from each other, and express a hydrogen atom, an aliphatic series radical, or an aryl group, respectively. However, Ra11 Ra53 It does not join together mutually.

[0018] Hereafter, this invention is explained to a detail. The compound of this invention is a compound which prevents the tenebrescence of the coloring matter image formed from a coupler, and is a compound of non-color enhancement. A non-color-enhancing compound is a compound which does not give coloring matter substantially, when it processes with color development processing liquid.

[0019] in addition -- the case where the radical in this detail in the letter includes an aliphatic series part as long as there is no notice of special -- the aliphatic series part -- a straight chain and branching -- or it may be annular, and it may be saturation, or may be unsaturated, for example, alkyl, the alkenyl, cycloalkyl, or the cyclo alkenyl is expressed, and even if these did not permute, they may have the substituent. Moreover, when it includes an aryl part, the aryl part may be a monocycle, or may be the condensed ring, and even if not permuted, it may have the substituent. Moreover, when it includes a heterocycle part, the heterocycle part has a hetero atom (for example, a nitrogen atom, a sulfur atom, an oxygen atom) in endocyclic, it may be a saturation ring, or you may be a partial saturation ring, and it may be a monocycle, or you may be the condensed ring, and even if not permuted, you may have the substituent.

[0020] That the substituent stated on these specifications should just be a replaceable radical For

example, an aliphatic series radical, An aryl group, a heterocycle radical, an acyl group, an acyloxy radical, the acylamino radical, An aliphatic series oxy-radical, an aryloxy group, a heterocycle oxy-radical, an aliphatic series oxy-carbonyl group, An aryloxy carbonyl group, a heterocycle oxy-carbonyl group, a carbamoyl group, An aliphatic series sulfonyl group, an aryl sulfonyl group, an aliphatic series sulfonyloxy radical, An arylsulfonyloxy radical, a sulfamoyl group, an aliphatic series sulfonamide radical, An aryl sulfonamide radical, the amino group, the aliphatic series amino group, an arylamino radical, An aliphatic series oxy-carbonyl-amino radical, an aryloxycarbonylamine radical, An aliphatic series sulfinyl group, an aryl sulfinyl group, an aliphatic series thio radical, an aryl thio radical, A hydroxy group, a cyano group, a nitro group, a sulfonic group, the hydroxy amino group, The aliphatic series oxy-amino group, the aryloxy amino group, a carbamoyl amino radical, A sulfamoylamino group, a halogen atom, a sulfamoyl carbamoyl group, a carbamoyl sulfamoyl group, JI aliphatic series oxy-FOSUFINIRU, diaryl oxy-FOSUFINIRU, etc. can be raised.

[0021] Ral and Ral1 are the inside of a formula, and the aliphatic series radical (preferably) which may have the hydrogen atom and the substituent. It is the alkyl group of the carbon numbers 1-40 which may have the substituent. For example, methyl, Ethyl, i-propyl, cyclohexyl, benzyl, dodecyl, 2-(2, 4-G t-pentyl phenoxy) ethyl, The acyl group which may have 2-(butoxycarbonyl) ethyl and a substituent (preferably) The alkyl carbonyl group of the carbon numbers 2-42 which may have the substituent, It is the ant-RUKARUBONIRU radical of the carbon numbers 7-47 which may have the alkenyl carbonyl group or substituent of carbon numbers 3-42 which may have the substituent. For example, acetyl, pivaloyl, myristoyl, benzoyl, 4-t-BUCHIRI benzoyl, The aliphatic series or the aryl sulfonyl group (it is the ant-RUSURUHONIRU radical of the carbon numbers 6-46 which may have the alkane sulfonyl group or substituent of carbon numbers 1-40 which may have the substituent preferably) which may have acryloyl, methacryloyl one, and a substituent For example, a butane sulfonyl, a hexyloxy ethane sulfonyl, benzenesulphonyl, and 4-dodecyloxy benzenesulphonyl are expressed.

[0022] Ra2, Ra21, Ra22, Ra23, and Ra24 A hydrogen atom or a substituent (as a desirable substituent) An aliphatic series radical, a heterocycle radical, the acylamino radical, a sulfonamide radical, a carbamoyl amino radical, Aliphatic series or an ant-RUOKISHI carbonyl group, aliphatic series, or an aryloxycarbonylamine radical, aliphatic series or an aryloxy group, aliphatic series or an ant-RUCHIO radical, aliphatic series or an ant-RUSURUHONIRU radical, and a halogen atom -- it is -- case these are possible -- further -- a substituent -- having -- **** -- it expresses.

[0023] Ra3, Ra31, Ra32, Ra33, and Ra4 and Ra41 The aliphatic series radical which may be the same, or may differ and may have the hydrogen atom and the substituent (it is the alkyl group of the carbon numbers 1-20 which may have the substituent preferably) For example, the aryl group (you may have the substituent with carbon numbers 6-30 preferably, for example, they are phenyl and 4-methoxypheny) which may have methyl, ethyl, i-propyl, dodecyl, cyclohexyl, benzyl, or a substituent is expressed.

[0024] Ra5, Ra51, Ra52, and Ra53 The aliphatic series radical which may have the substituent (it is the alkenyl radical of the carbon numbers 2-42 which may have the alkyl group or substituent of carbon numbers 1-40 which may have the substituent preferably) For example, methyl, ethyl, i-propyl, cyclohexyl, t-butyl, Benzyl, dodecyl, methoxymethyl, butyl thiomethyl, phenethyl, The aryl group which may have an allyl compound, vinyl, and a substituent (you may have the substituent with carbon numbers 6-36 preferably) For example, phenyl, 4-methylphenyl, 2, 4-G t-buthylphenyl, 4-myristoyl aminophenyl, 3-dodecyloxy phenyl, Even if it has the substituent A good acyl group (it is the aryl carbonyl group of the carbon numbers 7-47 which may have the alkenyl carbonyl group or substituent of carbon numbers 3-42 which may have the alkyl carbonyl group or substituent of carbon numbers 2-42 which may have the substituent preferably) For example, acetyl, pivaloyl, myristoyl, acryloyl, methacryloyl, The aliphatic series which may have benzoyl and a substituent, or an ant-RUOKISHI carbonyl group (it is the ant-RUOKISHI carbonyl group of the carbon numbers 7-47 which may have the alkoxy carbonyl group or substituent of carbon numbers 2-42 which may have the substituent preferably) For example, hexyloxy carbonyl, 2-ethylhexyloxy carbonyl, Phenoxy carbonyl, 2, 4-G t-butyl phenoxy carbonyl, The carbamoyl group which may have the substituent (it is the ant-RUKARUBA moil radical of the carbon numbers 7-47 which may have the alkyl carbamoyl group or

substituent of carbon numbers 2-42 which may have the substituent preferably) For example, diethylcarbamoyl, N-methyl-N-phenylcarbamoyl, the aliphatic series which may have the substituent, or an ant-RUSURUHONIRU radical (the ant-RUSURUHONIRU radical of the carbon numbers 6-46 which may have the alkane sulfonyl group or substituent of carbon numbers 1-40 which may have the substituent preferably -- it is -- for example, a butane sulfonyl group --) A cyclohexyl sulfonyl group, a benzenesulphonyl radical, 4-dodecyloxy benzenesulphonyl, or the sulfamoyl group (the arylsulfamoyl group of the carbon numbers 6-46 which may have the alkyl sulfamoyl group or substituent of carbon numbers 1-40 which may have the substituent preferably -- it is -- for example, dibutyl sulfamoyl --) which may have the substituent Dodecyl sulfamoyl, phenyl sulfamoyl, and N-octyl-N-phenyl sulfamoyl are expressed.

[0025] Xa Express **, an oxygen atom, or a sulfur atom. m expresses 1-4, and when m is two or more, two or more Ra2 may be the same, or may differ. When two or more Ra2 or more by two has m in each-other ortho position, you may join together mutually. However, Ra1, and Ra5 and Ra11 Ra51 and Ra11 Ra53 It does not join together mutually.

[0026] A desirable radical is explained in this invention. In a general formula (A), in respect of the effectiveness of this invention, its case where they are a hydrogen atom or an aliphatic series radical is desirable, and Ra1 is still more desirable, when it is a hydrogen atom. The case where they are a hydrogen atom, an aliphatic series radical, or the acylamino radical is desirable, and when it is an aliphatic series radical, it is still more desirable, and Ra2 is the most desirable when it is an alkyl group. The case where they are a hydrogen atom or an aliphatic series radical is desirable, and Ra3 and Ra4 are still more desirable when it is a hydrogen atom or an alkyl group, and especially when at least one side of Ra3 and Ra4 is a hydrogen atom, they are desirable. Ra5 has an aliphatic series radical, an aryl group, an acyl group, aliphatic series or an aryloxy carbonyl group, and a desirable carbamoyl group, an aliphatic series radical, an aryl group, and its acyl group are still more desirable, an alkyl group, an alkenyl radical, and especially its alkenyl carbonyl group are desirable, and an alkyl group and its alkenyl radical are the most desirable. Xa A ****** atom is desirable. Its case of -ORa1 where it has permuted by the alt.radical or the para position at least is desirable, and Ra2 is still more desirable when having permuted by the ortho position and the para position.

[0027] Also in a general formula (A), Ra1 is a hydrogen atom in respect of the effectiveness of this invention, Ra2 is an alkyl group and m is 1 or 2 (when m is 1). this Ra2 is the case where this Ra2 may be the same, or differ, and it has permuted by the para position and the ortho position of -ORa1, when the ortho position of -ORa1 or the para position, and m are 2 at least. Ra3 a hydrogen atom and Ra5 for a hydrogen atom or an alkyl group, and Ra4 An alkyl group, An alkenyl radical or an alkenyl carbonyl group, and Xa have the desirable case of the compound of the combination which is an oxygen atom, Ra1 is a hydrogen atom, Ra2 is an alkyl group and m is 2 (in this case, this Ra2 may be the same, or you may differ, and it is the para position and the ortho position of -ORa1.). For a hydrogen atom or an alkyl group, and Ra4, a hydrogen atom and Ra5 are [Ra3] an alkyl group or an alkenyl radical, and Xa. It is still more desirable when it is an oxygen atom.

[0028] It sets to a general formula (A-I), and is Ra1 and Ra11 at the point of the effectiveness of this invention. The case where they are a hydrogen atom, an aliphatic series radical, or an acyl group is desirable, and it is still more desirable when it is a hydrogen atom, an alkyl group, an alkenyl radical, an alkyl carbonyl group, or an alkenyl carbonyl group. Ra2 and Ra21 The case where it is an aliphatic series radical is desirable, and it is still more desirable when it is an alkyl group. Ra3, Ra31, and Ra4 and Ra41 The case where they are a hydrogen atom or an aliphatic series radical is desirable, when it is a hydrogen atom or an alkyl group, it is still more desirable, and on the other hand, Ra3 and Ra4 reach at least, and they are Ra31 and Ra41. It is the most desirable when at least one side is a hydrogen atom. Ra5 and Ra51 The case where they are an aliphatic series radical, an aryl group, or an acyl group is still more desirable, the case where they are a hydrogen atom, an aliphatic series radical, an aryl group, an acyl group, aliphatic series, an aryloxy carbonyl group, or a carbamoyl group is desirable, and the case where they are an alkyl group or an alkenyl radical is [especially the case where they are an alkyl group, an alkenyl radical, or an alkenyl carbonyl group is desirable, and] the most desirable. Xa And as for

Xa1, it is desirable that it is an oxygen atom. Ra2 is Ra21 of -ORa1. -ORa11 The case where it has permuted by the ortho position or the para position is desirable, and it is still more desirable when q is p and1 in that case. Za The case where it is -C(Ra6) (Ra7)- is desirable, and it is still more desirable when it is -CH(Ra7)-. Ra6 and Ra7 have respectively the desirable case where they are a hydrogen atom or an alkyl group.

[0029] Also in a general formula (A-I), Ra1 is a hydrogen atom in respect of the effectiveness of this invention, and it is Ra11. They are a hydrogen atom, an alkyl group, an alkenyl radical, an alkyl carbonyl group, or an alkenyl carbonyl group. Ra2 and Ra21 It is an alkyl group (p and q1, and this Ra2 -- the ortho position of -ORa1, or the para position -- this -- a21 -- the ortho position of -ORa11, or the para position). Ra3 and Ra31 A hydrogen atom or an alkyl group, and Ra4 and Ra41 Hydrogen atom, Ra5 and Ra51 An alkyl group, an alkenyl radical, or an alkenyl carbonyl group, Xa and Xa1 are an oxygen atom and Za. The case of the compound of the combination which is -CH(Ra7)- (Ra7 is a hydrogen atom or an alkyl group, and is an alkyl group especially preferably) is desirable. It is Ra5 and Ra51 in these cases. It is still more desirable when it is an alkyl group or an alkenyl radical.

[0030] It sets to a general formula (A-II), and is Ra22 at the point of the effectiveness of this invention. The case where it is an aliphatic series radical is desirable, and it is still more desirable when it is an alkyl group. Ra23 The case where they are a hydrogen atom or an aliphatic series radical is desirable, and it is still more desirable when it is an alkyl group. Ra32 The case where they are a hydrogen atom or an aliphatic series radical is desirable, and it is still more desirable when it is a hydrogen atom or an alkyl group. Ra52 The case where they are an aliphatic series radical, an aryl group, or an acyl group is still more desirable, the case where they are a hydrogen atom, an aliphatic series radical, an aryl group, an acyl group, aliphatic series, an aryloxy carbonyl group, or a carbamoyl group is desirable, and the case where they are an alkyl group or an alkenyl radical is [especially the case where they are an alkyl group, an alkenyl radical, or an alkenyl carbonyl group is desirable, and] the most desirable.

[0031] Also in a general formula (A-II), it is Ra22 at the point of the effectiveness of this invention. It is an alkyl group and is Ra23. It is a hydrogen atom or an alkyl group, and is Ra32. It is a hydrogen atom or an alkyl group, and is Ra52. The case of the compound of the combination which is an alkyl group, an alkenyl radical, or an alkenyl carbonyl group is desirable, and it is Ra23 also in it. Especially the thing that is an alkyl group is desirable, and it is Ra52 also in it. It is the most desirable when it is an alkyl group or an alkenyl radical

[0032] The desirable radical in a general formula (A-III) is explained. It sets to a general formula (A-III), and is Ra11 at the point of the effectiveness of this invention. The case where they are a hydrogen atom, an aliphatic series radical, or an acyl group is desirable, and it is still more desirable when it is a hydrogen atom, an alkyl group, an alkenyl radical, an alkyl carbonyl group, or an alkenyl carbonyl group. Ra22 And Ra24 The case where they are a hydrogen atom or an aliphatic series radical is desirable, and it is still more desirable when it is an alkyl group. Ra32 And Ra33 The case where they are a hydrogen atom or an aliphatic series radical is desirable, and it is still more desirable when it is an alkyl group. Ra52 And Ra53 The case where they are an aliphatic series radical, an aryl group, or an acyl group is still more desirable, the case where they are a hydrogen atom, an aliphatic series radical, an aryl group, an acyl group, aliphatic series, an aryloxy carbonyl group, or a carbamoyl group is desirable, and the case where they are an alkyl group or an alkenyl radical is [especially the case where they are an alkyl group, an alkenyl radical, or an alkenyl carbonyl group is desirable, and] the most desirable. Ra6 has the desirable case where they are a hydrogen atom or an alkyl group, and its hydrogen atom is more desirable. Ra7 has the desirable case where they are a hydrogen atom or an alkyl group, and its case where it is an alkyl group is more desirable.

[0033] Also in a general formula (A-III), it is Ra11 at the point of the effectiveness of this invention. It is a hydrogen atom, an alkyl group, an alkenyl radical, an alkyl carbonyl group, or an alkenyl carbonyl group, and is Ra22. And Ra24 It is an alkyl group and is Ra32. And Ra33 It is a hydrogen atom or an alkyl group, and is Ra52. And Ra53 It is an alkyl group, an alkenyl radical, or an alkenyl carbonyl group, and Ra6 is a hydrogen atom and its case of the compound of the combination which is a hydrogen atom or an alkyl group is [Ra7] desirable. Also in these, it is Ra32. And Ra33 It is desirable

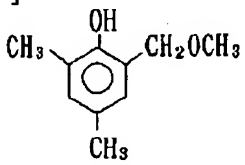
and especially the thing of an alkyl group is Ra52 also in it further. And Ra53 It is an alkyl group or an alkenyl radical, and the case where Ra7 is an alkyl group is the most desirable.

[0034] Next, although the example of a concrete compound of these compounds is shown below, the compound used for this invention by this is not limited.

[0035]

[Formula 10]

(A－1)



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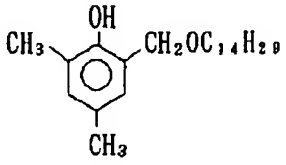

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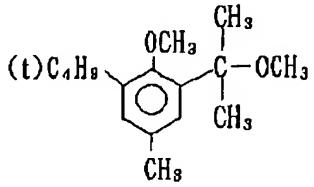

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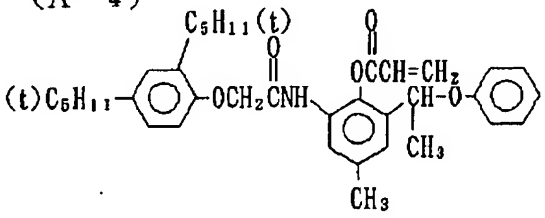

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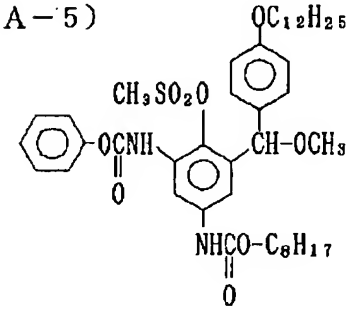
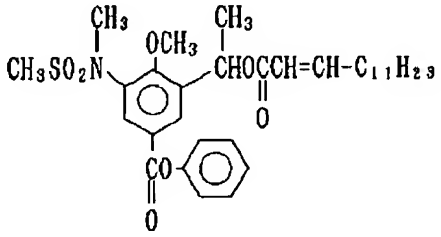


(A－6)



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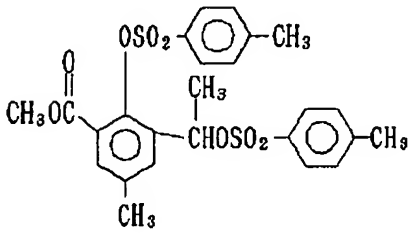

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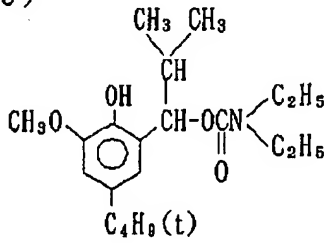

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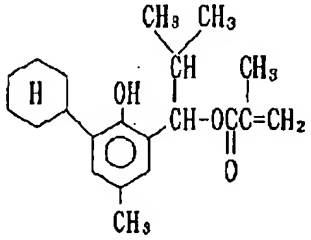

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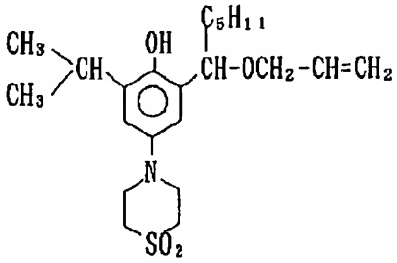
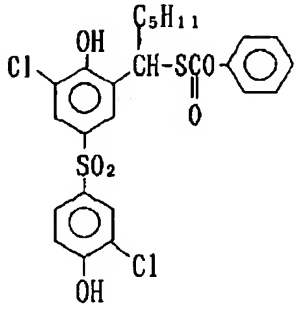


[0036]

[Formula 11]

(A－11)



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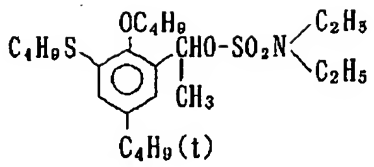

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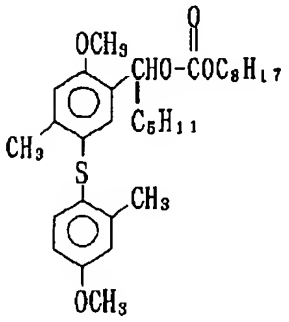

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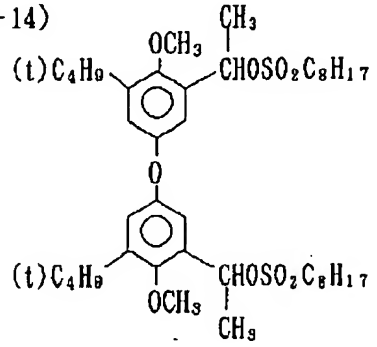

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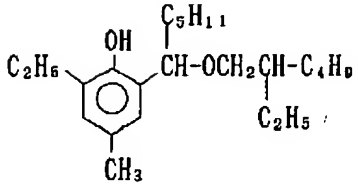

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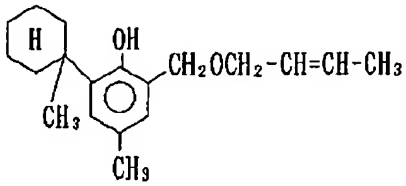

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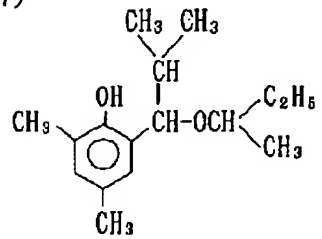

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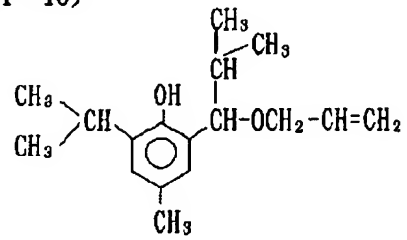

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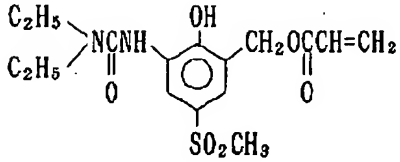

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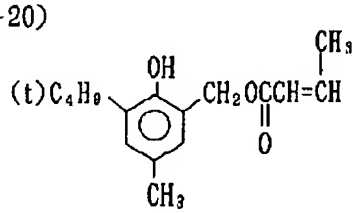
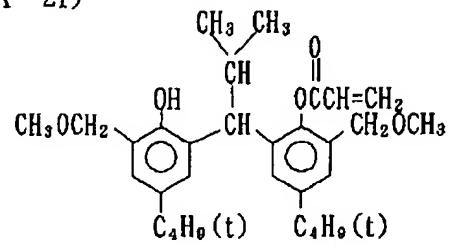


[0037]
[Formula 12]

(A－21)



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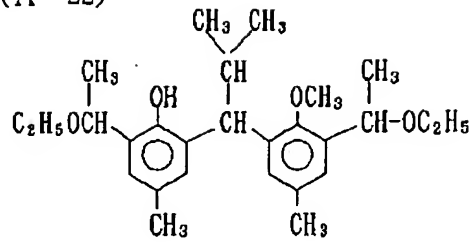

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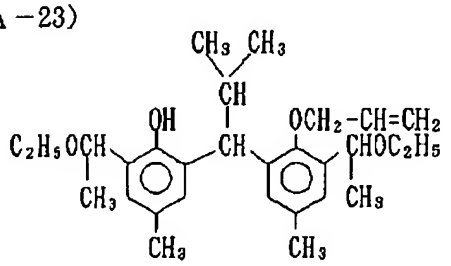

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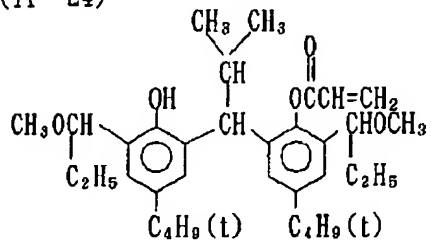

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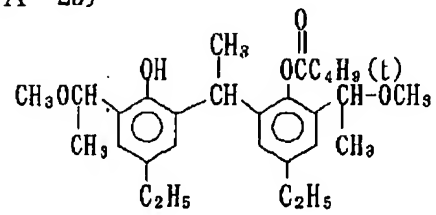

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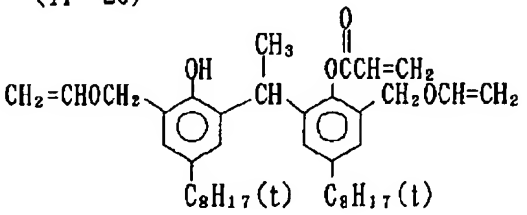

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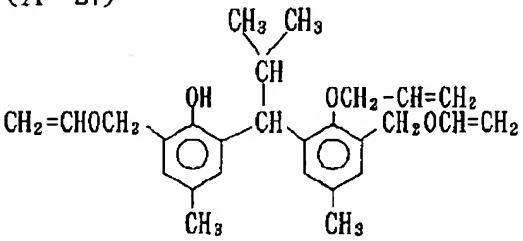

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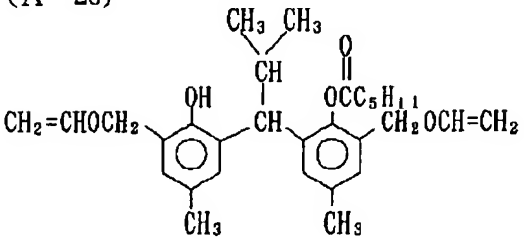

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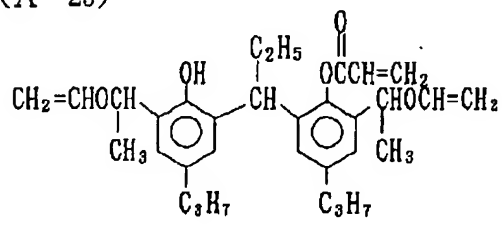

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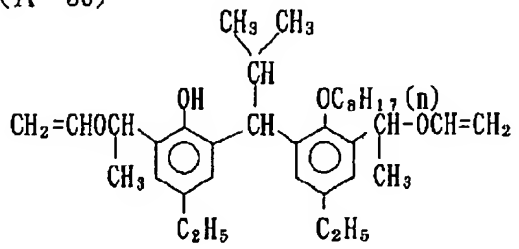
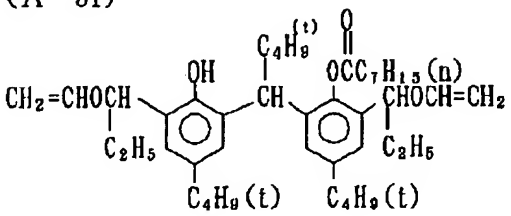


[0038]
[Formula 13]

(A－31)



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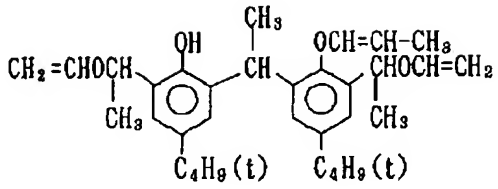

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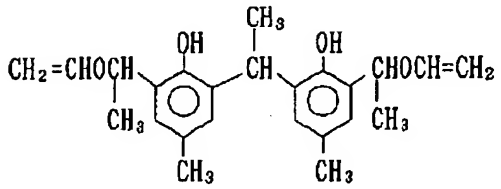

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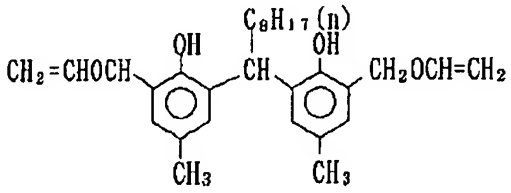

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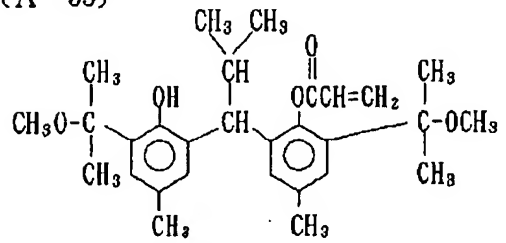

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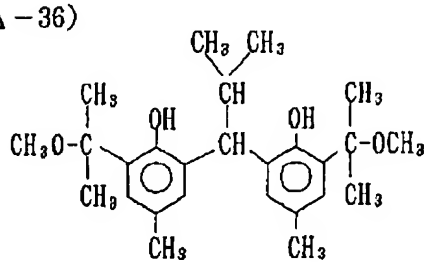

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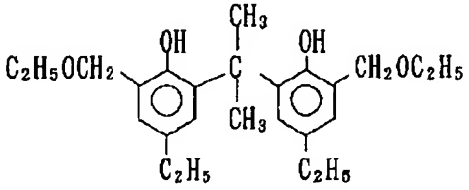

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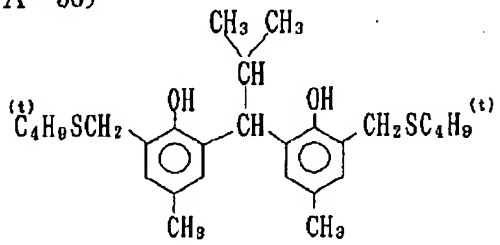

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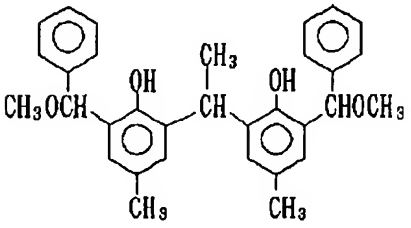

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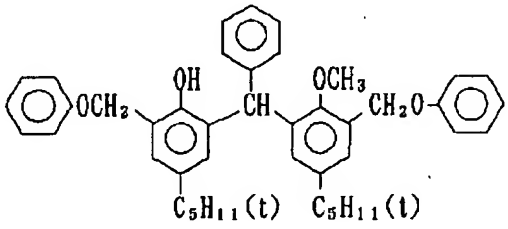

[0039]
[Formula 14]

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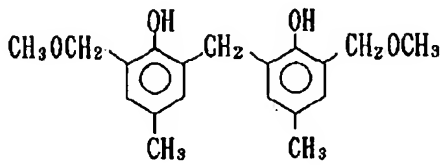

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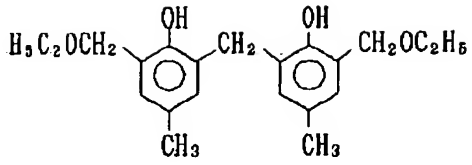

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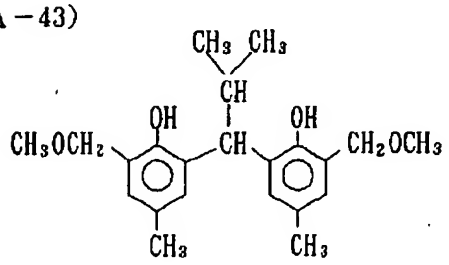

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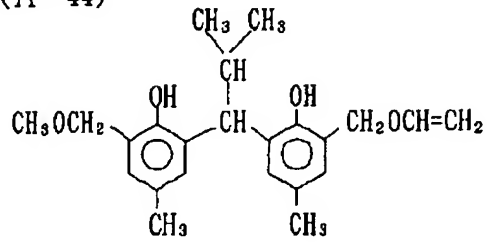

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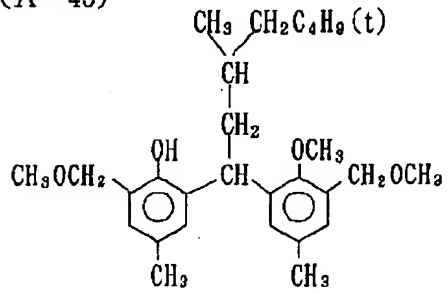

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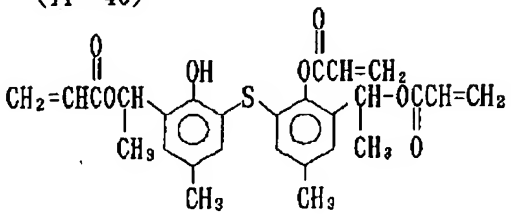

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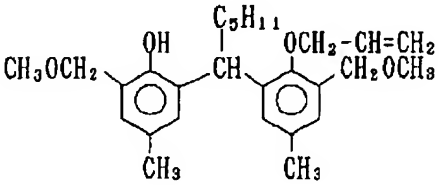

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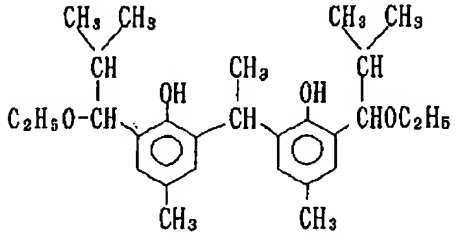

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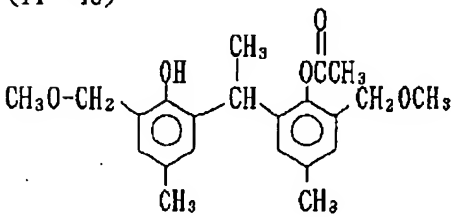

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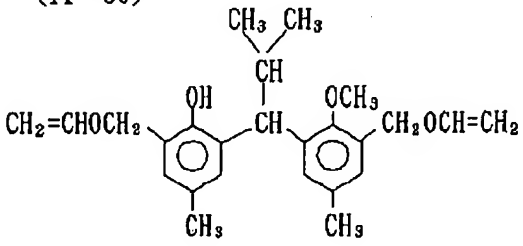

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[Formula 15]

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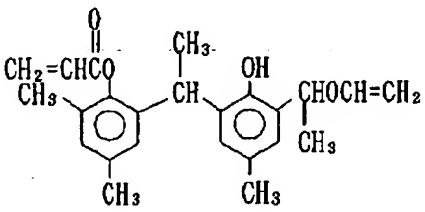

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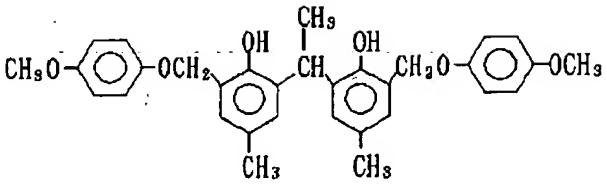

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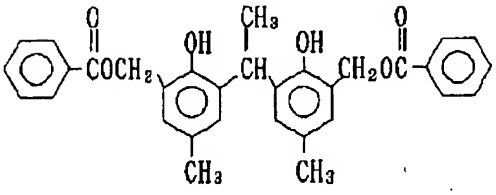

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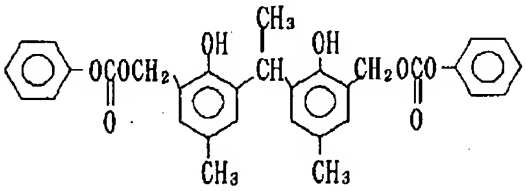

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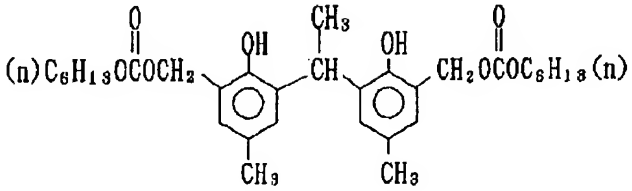

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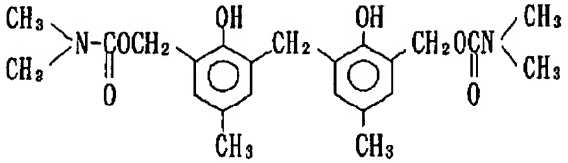

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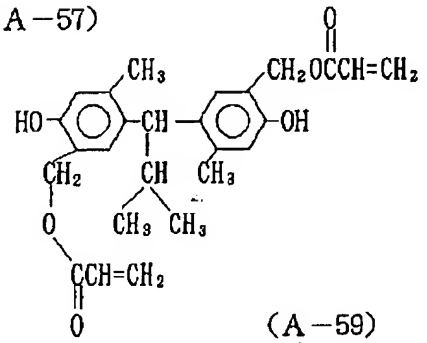

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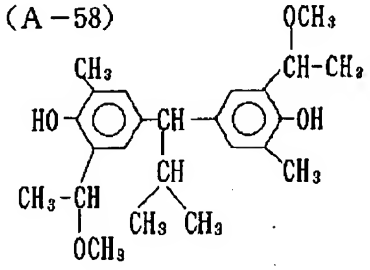

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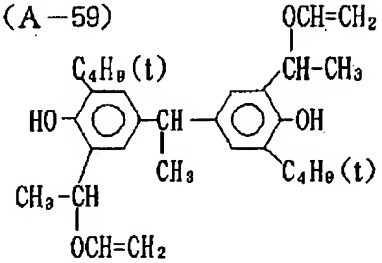
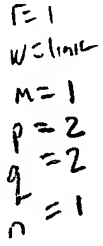


[0041]

[Formula 16]



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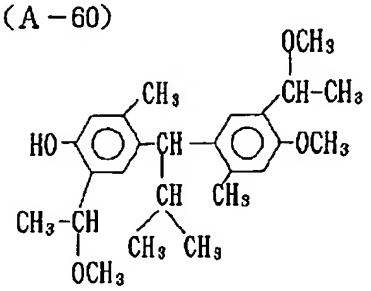
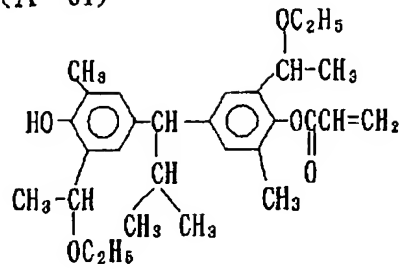
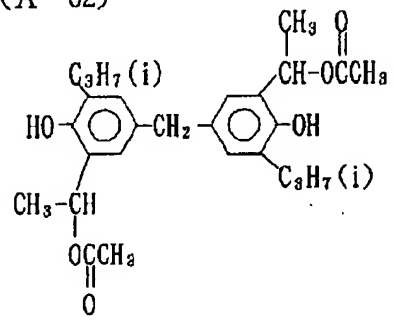


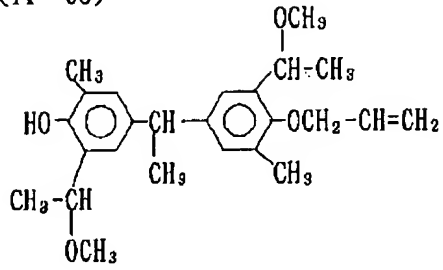
(A－61)



(A－62)



(A－63)



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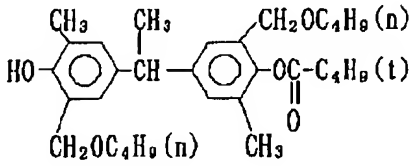
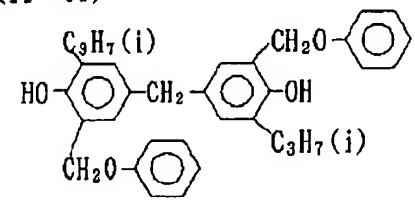
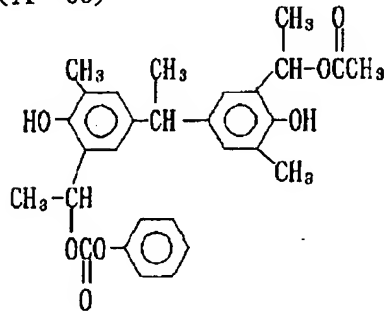


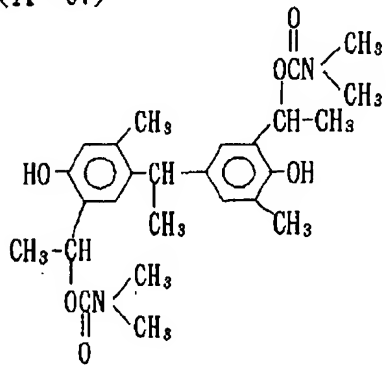
(A－65)



(A－66)



(A－67)



[0042] The compound expressed with the general formula (A) of this invention is compoundable by the approach according to an approach given in JP,63-275620,A, U.S. Pat. No. 485,772, etc., or it. The synthetic example of a typical compound is shown below.

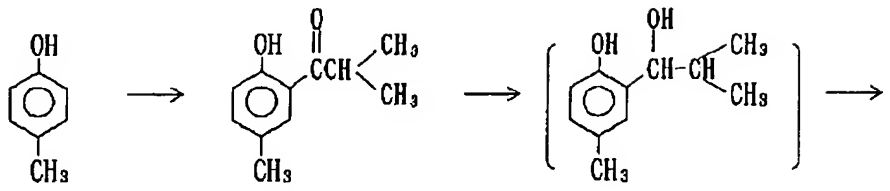
[0043] The synthetic example 1 (composition of an instantiation compound (43 A- 44))

Instantiation compound A - 43 and 44 were compounded by the following roots.

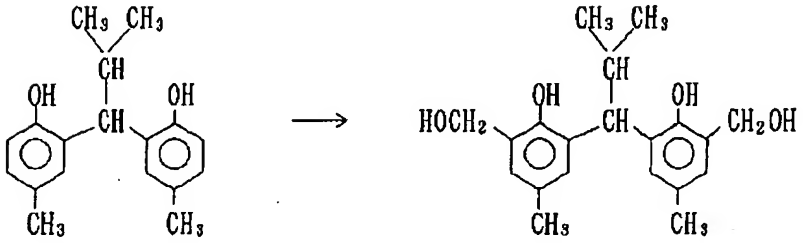
[0044]

[Formula 17]

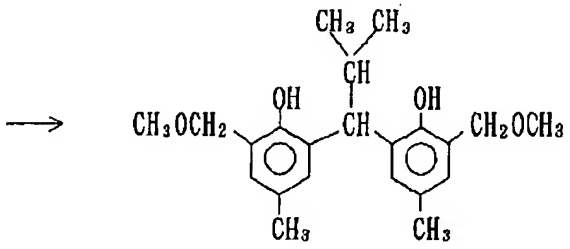
A－43、A－44の合成ルート



中間体(1) 中間体(2)



中間体(3) 中間体(4)



A－43

[0045] Synthetic Parakou resol 70g of an intermediate product (1) was dissolved in benzene 150ml, isobutyryl chloride 70g was dropped in 30 minutes at the bottom of heating reflux, and heating reflux was carried out for further 4 hours. 90g of aluminum chlorides was added in 30 minutes, keeping an internal temperature at 80-95 degrees C, after carrying out reduced pressure distilling off of the benzene. After carrying out heating stirring at 90 degrees C for further 1 hour, 300ml of cold water was filled with reaction mixture, and it extracted by ethyl-acetate ester 250ml. After 250ml of saturation brine washed the ethyl-acetate ester layer twice, reduced pressure distilling off of the solvent was carried out. Residue was refined by alumina column chromatography and the intermediate field (1) of a colorless liquid were obtained. Yield of 102g 88.4% [0046] of yield Synthetic intermediate-field (1)30g of intermediate field (3) was dissolved in tetrahydrofuran 60ml isopropyl alcohol 30ml, and 6.3g of sodium borohydrides was added in 30 minutes under stirring at 20-25 degrees C. After raising temperature to 30-40 degrees C after that and ****(ing) for 2 hours, 200ml of cold water containing 10ml of acetic acids was filled with reaction mixture, and it extracted by ethyl-acetate ester 200ml. 250ml of saturation brine washed the ethyl-acetate ester layer twice, reduced pressure distilling off after desiccation and of the solvent was carried out with sulfuric anhydride magnesium, and intermediate field (2) were obtained.
[0047] 20ml of Parakou resol 50g acetic acids was added to this, it dissolved in it, and 0.9ml of concentrated sulfuric acid was dropped at the bottom of **** at 20-25 degrees C. The internal temperature was raised to 40 degrees C with dropping. After stirring for 30 minutes at 40 more degrees C, ethyl-acetate ester 200ml was added and it dissolved. 250ml of saturation brine washed the ethyl-

acetate ester layer 3 times, reduced pressure distilling off of the solvent was carried out, and the amorphous-like solid-state was obtained. Crystallization of this was carried out by n-hexane 100ml, it recrystallized in n-hexane 100ml further, and intermediate field (3) were obtained. The melting point of 163-165 degrees C Yield of 32g 70.3% [0048] of yield Synthetic intermediate-field (3)22g and 8.2g of potassium hydroxides of A-44 were dissolved in 30ml [of water], and methanol 30ml, and it stirred at 50-60 degrees C. 170ml of formalin water was dropped at this in 30 minutes 37%, and it stirred at 50-60 degrees C for further 6 hours. Reaction mixture was cooled, 10ml of acetic acids was added, and it extracted by ethyl-acetate ester 300ml. 300ml of saturation brine washed the ethyl-acetate ester layer 3 times, reduced pressure distilling off of the solvent was carried out, and the amorphous-like solid-state was obtained. Crystallization of this was carried out by acetonitrile 50ml, it recrystallized in acetonitrile 50ml further, and intermediate field (4) were obtained. The melting point of 190-192 degrees C Yield of 18.5g 70.6% [0049] of yield The synthetic intermediate field (4) of A-43 and 15g were dissolved in methanol 100ml, and it ****(ed) at 40-45 degrees C. 1ml of concentrated sulfuric acid was dropped at this in 5 minutes, and it ****(ed) for further 5 hours. 250ml of cold water was filled with reaction mixture, and it extracted by ethyl-acetate ester 250ml. 250ml of saturation brine washed the ethyl-acetate ester layer twice, and reduced pressure distilling off of the solvent was carried out after desiccation with sulfuric anhydride magnesium. Residue was refined by silica gel column chromatography -, and the amorphous-like solid-state was obtained. Crystallization of the obtained oily matter was carried out by methanol 30ml, and the white crystal was obtained. The melting point of 109-111 degrees C Yield of 13.0g Other compounds are [79.9% of yield] compoundable similarly.

[0050] The sensitive material of this invention contains at least one sort of the compound by which at least one layer on a base material is expressed with the general formula (A) of this invention. The silver halide emulsion layer which contains a coupler among hydrophilic colloid layers as a layer to contain is desirable.

[0051] The compound expressed with the general formula (A) of this invention is 2 1m of sensitive material. Although it is desirable to use by Hits 0.0002-5g, using by 0.001-3g is more desirable and it changes with classes of coupler as the amount used to a coupler It is the 1-200-mol range of % suitably [using it in / 0.5-300 mol / % to the coupler (coupler preferably used in the same layer) used], and preferably.

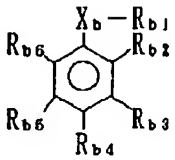
[0052] The compound expressed with the general formula (A) of this invention may be used together with a well-known fading inhibitor, and the fading prevention effectiveness becomes still larger in that case. You may use together two or more sorts of compounds similarly expressed with a general formula (A).

[0053] As for the compound expressed with the general formula (A) of this invention, it is desirable to use in the same layer with the compound expressed with the following general formula (B) in respect of the effectiveness of this invention, and its case where it is ******(ed) and used is still more desirable.

[0054]

[Formula 18]

一般式（B）



[0055] (Rb1 expresses an aliphatic series radical or a heterocycle radical among a formula.) even if Rb2, Rb3, Rb4, Rb5, and Rb6 are the same -- you may differ -- respectively -- a hydrogen atom, an aliphatic series radical, aliphatic series or an aryl acyl group, aliphatic series or an aryl acylamino radical, aliphatic series or an aryloxy carbonyl group, a halogen atom, aliphatic series or an ant-RUSURUHONIRU radical, a carbamoyl group, a sulfamoyl group, or -Xb -- '-Rb1' It expresses. Xb And Xb' expresses -O-, -S-, or -N(Rb7)-, respectively. - Xb-Rb1 and the radical which is in the ortho position mutually among Rb2, Rb3, Rb4, Rb5, and Rb6 may join together, five to 8 membered-ring may be

formed, and it is Rb1, Rb7, or Rb1'. Rb7 may join together mutually and may form five to 7 membered-ring. Rb1' And Rb7 is synonymous with Rb1. at least one [however,] of Rb2-the Rb6 -Xb -- '-Rb1' it is .

[0056] A general formula (B) is explained to a detail. Rb1 is the aliphatic series radical (preferably) which may have the substituent. It is the alkyl group which may have the substituent of carbon numbers 1-30. For example, methyl, i-propyl, benzyl, hexadecyl, cyclohexyl, 2-phenoxy ethyl, The heterocycle radical (it is the saturation heterocycle radical combined by the carbon atom of the carbon numbers 3-30 which may have the substituent preferably, for example, is 2-tetrahydropyranyl) which may have 2-methanesulfon amide ethyl or a substituent is expressed.

[0057] Rb2, Rb3, Rb4, Rb5, and Rb6 The aliphatic series radical which may be the same, or may differ and may have the hydrogen atom and the substituent, respectively (preferably) It is the alkyl group of the carbon numbers 1-30 which may have the substituent. For example, methyl, t-octyl, benzyl, cyclohexyl, n-dodecyl, s-butyl, The aliphatic series which may have 1 and 1-dimethyl-4-methoxycarbonyl butyl and a substituent, or an aryl acyl group (preferably) They are the alkyl acyl group of the carbon numbers 2-36 which may have the substituent, or the aryl acyl group of carbon numbers 7-43. For example, acetyl, pivaloyl, dodeca noil, benzoyl, 3-hexadecyl oxy-benzoyl, The aliphatic series which may have the substituent, or an aryl acylamino radical (preferably) It is the aryl acylamino radical of the carbon numbers 7-43 which may have the alkyl acylamino radical or substituent of carbon numbers 2-36 which may have the substituent. For example, acetamino, pivaloyl amino, 2-ethyl hexano ylamino, 2-(2, 4-G t-amyl phenoxy) octanoyl amino, dodeca noil amino, The aliphatic series which may have 3-butoxy benzoylamino and a substituent, or an aryloxy carbonyl group (preferably) It is the aryloxy carbonyl group of the carbon numbers 7-42 which may have the alkoxy carbonyl group or substituent of carbon numbers 2-36 which may have the substituent. For example, methoxycarbonyl, dodecyloxy carbonyl, 2-hexyloxy ethoxycarbonyl, 2, 4-G t-amyl phenoxy carbonyl, 4-methoxy phenoxy carbonyl, The aliphatic series which may have the halogen atom (for example, a fluorine, chlorine, a bromine) and the substituent, or an ant-RUSURUHONIRU radical (preferably) It is the aryl sulfonyl group of carbon numbers 6-41 which may have the alkane sulfonyl group or substituent of carbon numbers 1-30 which may have the substituent. For example, a methane sulfonyl, an octane sulfonyl, 4-(4-t-octyl phenoxy) butane sulfonyl, The carbamoyl group which may have 4-dodecyloxy benzenesulphonyl and a substituent (preferably) You may have the substituent with carbon numbers 2-36. For example, methyl carbamoyl, The sulfamoyl group which may have diethylcarbamoyl, N-methyl-N-phenylcarbamoyl, and a substituent (preferably) You may have the substituent with carbon numbers 1-30, for example, they are methyl sulfamoyl, dibutyl sulfamoyl, phenyl sulfamoyl, or -Xb'. - Rb1' It expresses.

[0058] Xb And Xb' expresses -O-, -S-, or -N(Rb7)-. - Xb-Rb1 and the substituent which is in the ortho position mutually among Rb2-Rb6 may join together, and five to 8 membered-ring (for example, the coumarane ring which may have the substituent, a chroman ring, an indan ring, a quinoline ring, etc. are mentioned, and these may form the spiro ring or the bicyclo ring further.) may be formed. Rb1, Rb7, or Rb1' It may join together mutually and Rb7 may form five to 7 membered-ring (for example, the piperazine ring, morpholine ring which may have the substituent). Rb1' and Rb7 are synonymous with Rb1. at least one [however,] of Rb2-the Rb6 -Xb -- '-Rb1' it is .

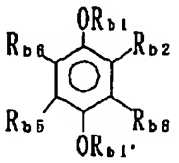
[0059] They are Rb1 and Rb1' at the point of the effectiveness of this invention. And Rb7 has the desirable case where it is an alkyl group, and its case where they are a hydrogen atom, an alkyl group, the acylamino radical, and -Xb'-Rb1' is [Rb2-Rb6] desirable.

[0060] In respect of the effectiveness of this invention, the compound expressed with following general formula (B-I) - (B-X) is still more desirable.

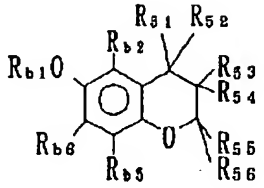
[0061]

[Formula 19]

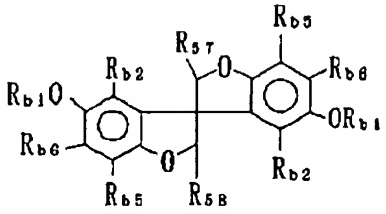
一般式（Ｂ－Ｉ）



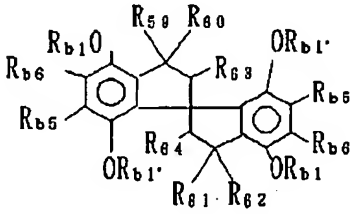
一般式（Ｂ－ＩＩ）



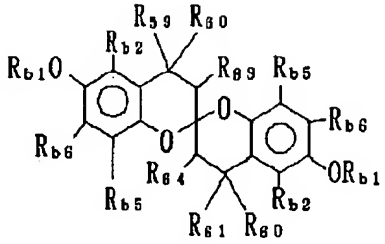
一般式（Ｂ－ＩＩＩ）



一般式（Ｂ－ＩＶ）

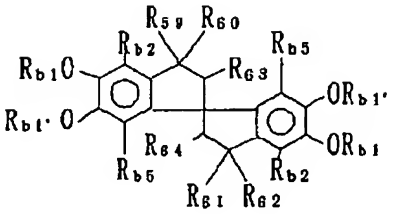


一般式（Ｂ－Ｖ）

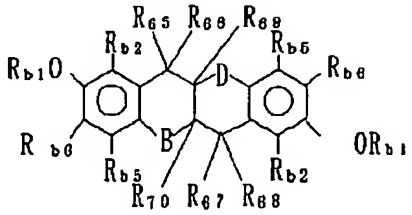


[0062]
[Formula 20]

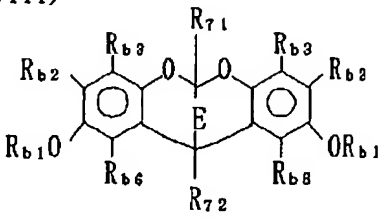
一般式（B－VI）



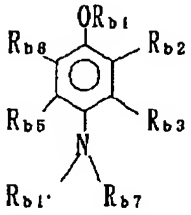
一般式（B－VII）



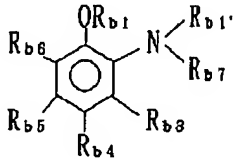
一般式（B－VIII）



一般式（B－IX）



一般式（B－X）



[0063] It sets to general formula (B-I) - (B-X), and they are Rb1-Rb7, and Rb1'. It is the same as what was specified by the general formula (B). R51-R72 -- it may be the same respectively, or you may differ, and the aryl group (it is the phenyl group of the carbon numbers 6-26 which may have the substituent preferably, for example, they are phenyl and 4-methylphenyl) which may have the alkyl group (you may have the substituent with carbon numbers 1-20 preferably, for example, they are methyl, ethyl, i-propyl, octadecyl, and benzyl) which may have the hydrogen atom and the substituent, or the substituent is expressed. It may join together mutually and R54, and R55, R55 and R56 may form the hydrocarbon ring of 5 - 7 member. B and D express single bond and -C(R80) (R81)- or -O-, and E expresses single bond or -C(R80) (R81)-. R80 and R81 may be the same, or may differ from each other, and express a hydrogen atom, an alkyl group (you may have the substituent with carbon numbers 1-20 preferably, for example, they are methyl, ethyl, i-propyl, dodecyl, and benzyl), or an aryl group (it is the phenyl group of the carbon numbers 6-26 which may have the substituent preferably, for example, they are phenyl and 4-methylphenyl) here.

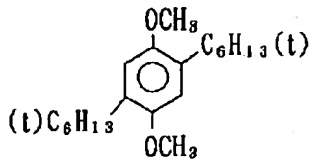
[0064] Among the compounds expressed with general formula (B-I) of this invention - (B-X), in respect of the effectiveness of this invention A general formula (B-I), (B-IV), (B-VI), and (B-VII) (B-VIII), the compound expressed with (B-IX) -- desirable -- a general formula (B-IV), (B-VI), and (B-VII) (B-VIII), The compound expressed is still more desirable and a general formula (B-IV) and the compound expressed with (B-VI) are the most desirable.

[0065] Although the example of a compound expressed with a general formula (B) below is shown, the compound used for this invention by this is not limited.

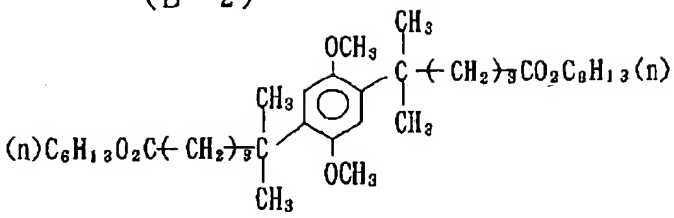
[0066]

[Formula 21]

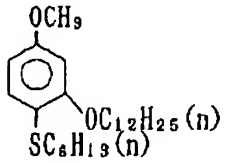
(B－1)



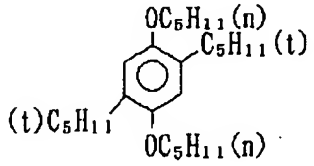
(B－2)



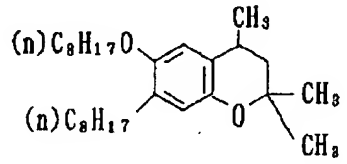
(B－3)



(B－4)



(B－5)



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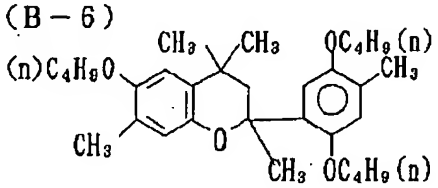
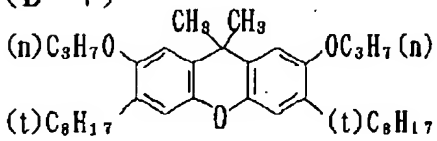
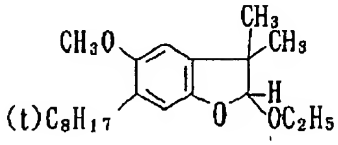


(B－7)



(B－8)



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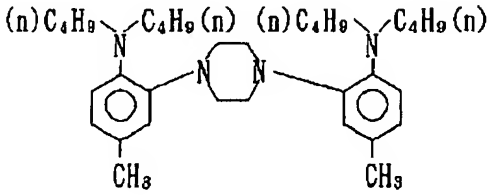
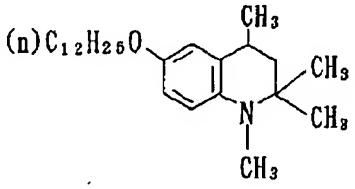
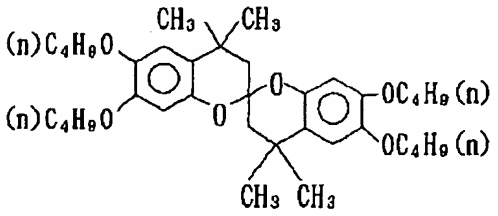


(B－10)



[0067]
[Formula 22]

(B－11)



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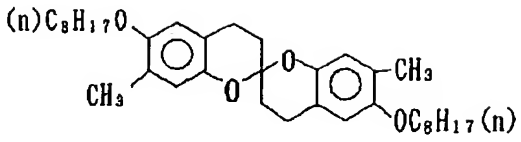

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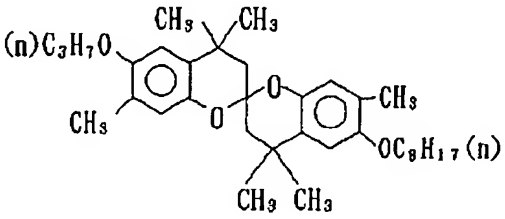

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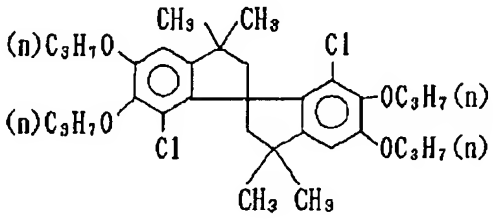
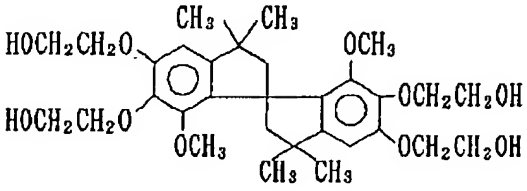
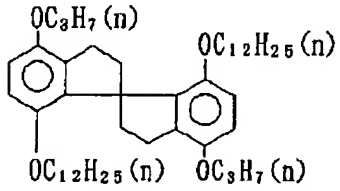


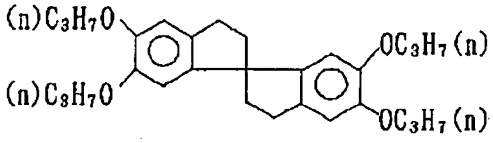
(B－15)



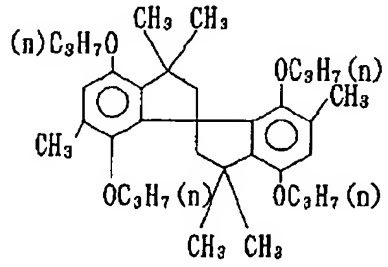
(B－16)



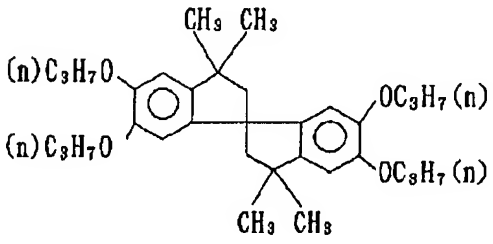
(B－17)



(B－18)

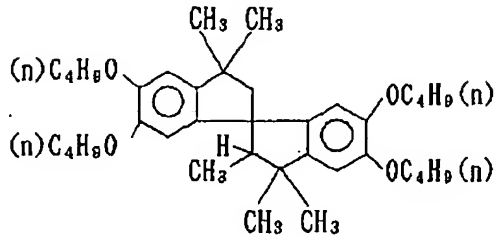


(B－19)

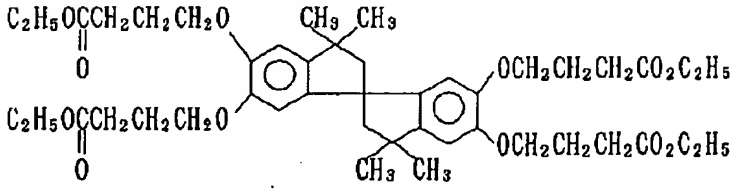


[0068]
[Formula 23]

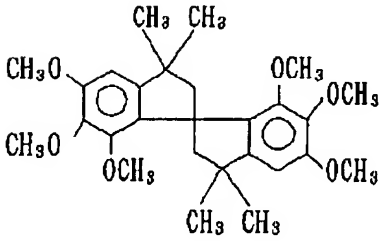
(B－20)



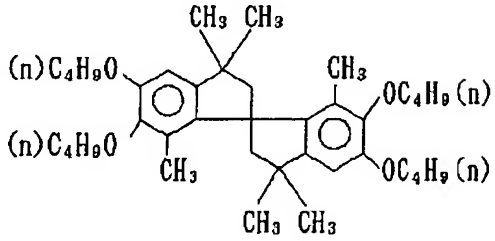
(B－21)



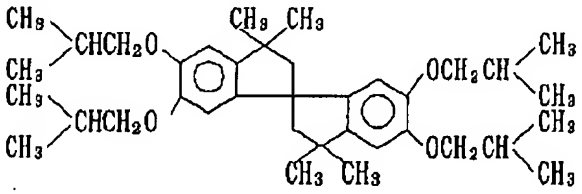
(B－22)



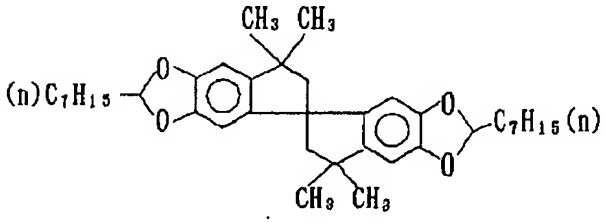
(B－23)



(B－24)

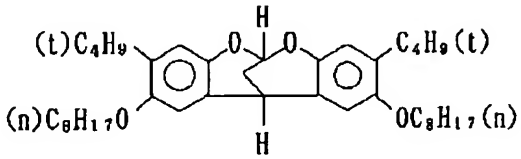


(B－25)

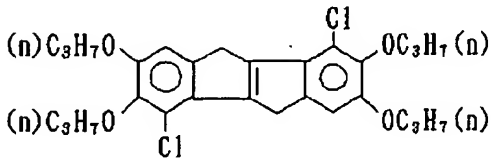


[0069]
[Formula 24]

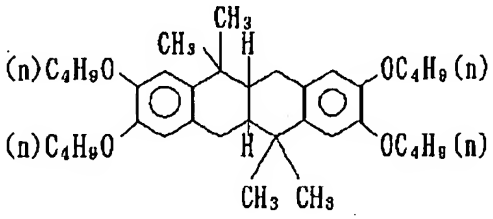
(B－26)



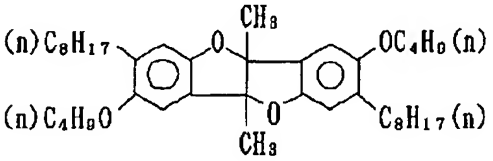
(B－27)



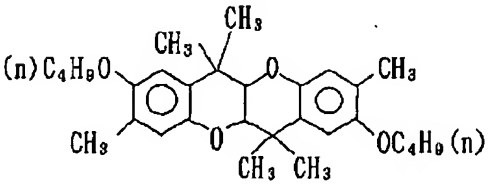
(B－28)



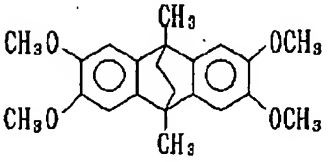
(B－29)



(B－30)

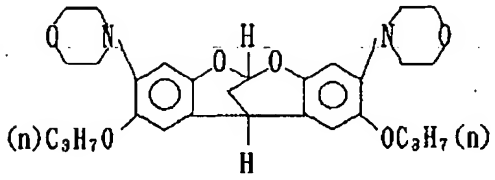


(B－31)

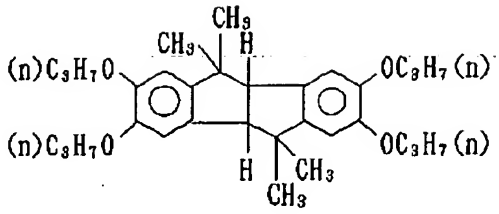


[0070]
[Formula 25]

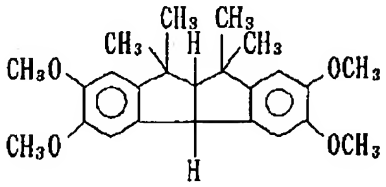
(B－32)



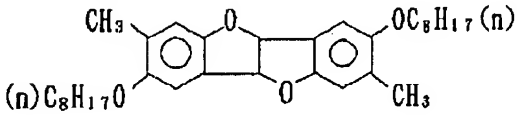
(B－33)



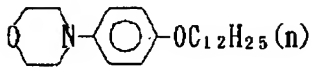
(B－34)



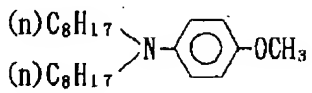
(B－35)



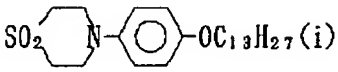
(B－36)



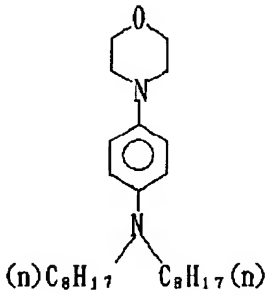
(B－37)



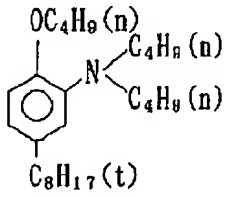
(B－38)



(B－39)

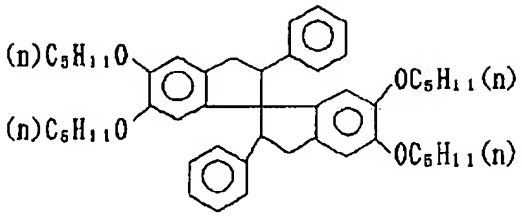


(B－40)

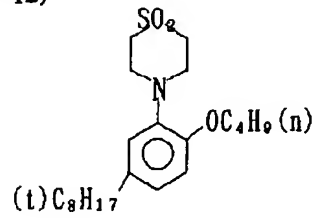


[0071]
[Formula 26]

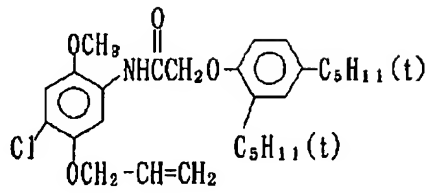
(B-41)



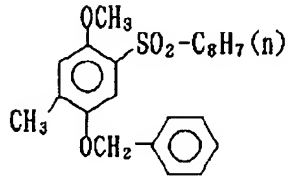
(B-42)



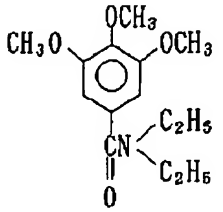
(B-43)



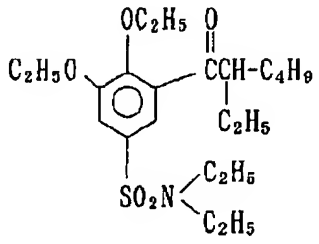
(B-44)



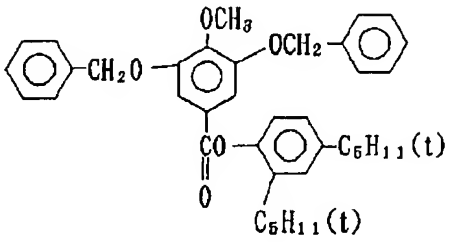
(B-45)



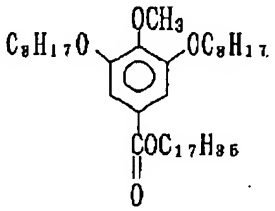
(B-46)



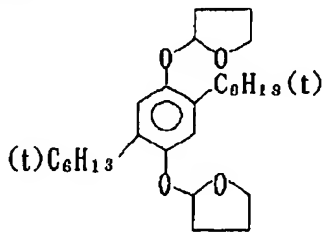
(B-47)



(B-48)



(B-49)



[0072] these compounds -- JP,45-14034,B, 56-24257, 59-52421, and JP,55-89835,A -- said -- 56-159644 a number -- said -- 62-244045 a number -- said -- 62-244246 A number, 62-273531, 63-95439, 63-95448, 63-95450, and Europe patent 239,972nd It is compoundable by the approach according to an approach given in a number, JP,4-330440,A, JP,58-105147,A, etc., or it.

[0073] one mol of couplers used although the amount of the compound used expressed with a general formula (B) changes with the classes and the amount of the coupler used in this invention -- receiving -- 0.5 - 300-mol % -- desirable -- 1 - 200-mol % -- it is the 2 - 100-mol range of % most preferably.

[0074] The compound expressed with the general formula (A) and general formula (B) of this invention is a compound which the tenebrescence of the coloring matter image formed from a coupler prevents, and is a compound of non-color enhancement. A non-color-enhancing compound is a compound which does not give coloring matter substantially, when it processes with color development liquid.
[0075] The compound and coupler which are expressed with the compound and general formula (B) which are expressed with the general formula (A) of this invention have the desirable water middle oil drop variational method which can introduce into sensitive material by the various well-known distribution approaches, dissolves in a high-boiling point organic solvent (a low-boiling point organic solvent is used together if needed), carries out [a variational method] emulsification distribution at a gelatin water solution, and is added to a silver halide emulsion. The example of the high-boiling point solvent used for a water middle oil drop variational method is indicated by U.S. Pat. No. 2,322,027 etc. moreover, the process of the latex variational method as one of the polymer variational methods, effectiveness, and the example of the latex for sinking in -- U.S. Pat. No. 4,199,363 and West German ********** (OLS) 2,541,274 a number -- said -- 2,541,230 A number, JP,53-41091,B and the Europe patent public presentation 029th, and 104 It is indicated by the number etc. and the variational method by the organic solvent fusibility polymer is indicated by the PCT international public presentation number WO 88/No. 00723 specification.
[0076] As a high-boiling point organic solvent which can be used for the above-mentioned water middle oil drop variational method FUTARU acid ester (for example, dibutyl phthalate and dioctyl phthalate --) Dicyclohexyl phthalate, G 2-ethylhexyl phthalate, DESHIRU phthalate, screw (2, 4-G tert-amyl phenyl) isophthalate, Screw (1 and 1-diethyl propyl) phthalate, a phosphoric acid, or the ester of HOSUHON for example, diphenyl phosphate, triphenyl phosphate, and tricresyl phosphate -- 2-ethylhexyl diphenyl phosphate, dioctyl butyl phosphate, Tricyclohexyl phosphate, tree 2-ethylhexyl phosphate, Tridodecyl phosphate, G 2-ethylhexyl phenyl phosphate, benzoates (for example, 2-ethylhexyl benzoate, 2, and 4-dichloro benzoate --) Dodecyl benzoate, 2-ethylhexyl-p-hydroxy benzoate, amides (for example, N and N-diethyl dodecane amide) and alcohols (isostearyl alcohol --) aliphatic series ester (for example, succinic-acid dibutoxy ethyl --), such as oleyl alcohol Di-2-ethylhexyl succinate, tetradecanoic acid 2-hexyl DESHIRU, Tributyl citrate, an aniline derivative (N, N - dibutyl-2-butoxy-5-tert-octyl aniline etc.), Chlorinated paraffin (paraffin of 10% - 80% of chlorine contents) trimesic acid ester (For example, trimesic acid tributyl), dodecylbenzene, diisopropyl naphthalene, phenols (for example, 2 and 4-G tert-p tert amylphenol --) 4-dodecyloxy phenol, 4-dodecyloxy carbonyl phenol, 4-(4-dodecyloxy phenyl sulfonyl) phenol and carboxylic acids (For example, 2- (2, 4-G tert-amyl phenoxy butanoic acid, 2-ethoxy octane decanoic acid) and alkyl phosphoric acids (for example, G 2 (ethylhexyl) phosphoric acid, a diphenyl phosphoric acid, dihexyl phenyl phosphate) are mentioned.) Moreover, the melting point may use together 30-degree-C or more organic solvent about 160 degrees C or less (for example, ethyl acetate, butyl acetate, ethyl propionate, a methyl ethyl ketone, a cyclohexanone, 2-ethoxyethyl acetate, dimethylformamide) as an auxiliary solvent.
[0077] a high-boiling point organic solvent -- a coupler -- receiving -- a weight ratio -- the amount of zero to 10.0 times -- desirable -- the amount of zero to 5.0 times -- it can be more preferably used in an amount zero to 1.0 times. In order to carry out this invention, it is desirable to carry out coupling to the oxidant of an aromatic series primary-amine system color development chief remedy, and to use it combining a yellow, a Magenta, the yellow pigmentation coupler that colors in cyanogen, a Magenta pigmentation coupler, and a cyanogen pigmentation coupler, respectively.
[0078] These couplers combined and used may be 4Eq to complex ion, may be 2Eq, and may have the shape of a polymer and oligomer. The coupler which furthermore combines and is used may be independent, or may be two or more kinds of mixing.
[0079] A desirable coupler is explained to using together in this invention. As a cyanogen pigmentation coupler, a phenol system and a naphthol system coupler are mentioned. U.S. Pat. No. 4,052,212 -- said -- the 4,146,396th a number -- said -- the 4,228,233rd a number -- said -- the 4,296,200th a number -- said -- the 2,369,929th a number -- said -- the 2,801,171st a number -- said -- the 2,772,162nd a number -- said -- the 2,895,826th a number -- said -- the 3,772,002nd a number -- said -- the 3,758,308th a

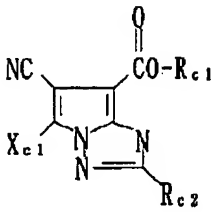
number -- said -- the 4,334,011st a number -- said -- the 4,327,173rd A number and the West German patent public presentation 3,329,729th a number -- the Europe patent 121,365th -- No. A -- said -- the 249,453rd -- No. A -- said -- the 333,185A2nd a number -- U.S. Pat. No. 3,446,622 -- said -- the 4,333,999th a number -- said -- the 4,775,616th a number -- said -- the 4,451,559th a number -- said -- the 4,427,767th a number -- said -- the 4,690,889th a number -- said -- the 4,254,212nd a number -- said -- the 4,296,199th A thing given in a number, JP,61-42653,A, etc. is desirable. furthermore, JP,64-553,A, 64-554, 64-555, 64-556, and the Europe patent public presentation 488,248th a number -- said -- the 491,197th a number -- said -- the 484,909th a number -- said -- the 456,226th An azole system coupler given in a number, and an imidazole system coupler given in U.S. Pat. No. 4,818,672 and JP,2-33144,A or an annular activity methylene mold cyan coupler given in JP,64-32260,A can also be used.

[0080] The compound expressed with a general formula (A) in respect of the effectiveness of this invention has the desirable case where ******(ed) with the cyanogen pigmentation coupler and it uses, and the general formula of the desirable cyanogen pigmentation coupler in that case is shown below.

[0081]

[Formula 27]

一般式（C）



[0082] Among a formula, RC1 expresses an aliphatic series radical, RC2 expresses an alkyl group or an aryl group, and XC1 expresses the radical (henceforth a balking radical) from which it can secede by the coupling reaction with a hydrogen atom or an aromatic series primary-amine developing-agent oxidant.

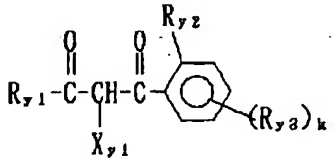
[0083] as an especially desirable cyanogen pigmentation coupler -- a general formula (C-I) the 17th page left lower column of JP,2-139544,A - given in the 20th page left lower column, the coupler of (C-II), and the Europe patent public presentation 488,248th a number -- said -- the 491,197th a number -- said -- the 484,909th a number -- said -- the 456,226th A number is raised.

[0084] As a Magenta pigmentation coupler, the compound of 5-pyrazolone system and a pyrazolo azole system is desirable. U.S. Pat. No. 4,310,619 -- said -- the 4,351,897th a number -- the Europe patent No. 73,636 and U.S. Pat. No. 3,061,432 -- said -- the 3,725,067th a number -- a research disclosure magazine -- No.24220 (June, 1984) -- JP,60-33552,A and a research disclosure magazine -- No.24230 (June, 1984) -- JP,60-43659,A, 61-72238, 60-35730, said -- 55-118034 a number -- said -- 60-185951 a number and U.S. Pat. No. 4,500,630 -- said -- the 4,540,654th a number -- said -- the 4,556,630th A thing given in a number, the international public presentation WO 88/No. 04795, etc. is more desirable. As a desirable Magenta pigmentation coupler, the Magenta pigmentation coupler of the pyrazolo azole system of the general formula (I) of the 3rd page lower right column of JP,2-139544,A - the 10th page lower right column and 5-pyrazolone Magenta pigmentation coupler of the general formula (M-1) of the 17th page left lower column of JP,2-139544,A - the 21st page left upper column are raised especially. An above-mentioned pyrazolo azole system Magenta pigmentation coupler is the most desirable.

[0085] As a yellow pigmentation coupler, for example U.S. Pat. No. 3,933,501, said -- the 4,022,620th a number -- said -- the 4,326,024th a number -- said -- the 4,401,752nd a number -- said -- the 4,248,961st a number -- said -- the 5,118,599th a number -- said -- the 3,973,968th a number -- said -- the 4,314,023rd a number -- said -- the 4,511,649th a number -- said -- the 5,118,599th a number -- the Europe patent 249,473rd -- No. A and JP,63-23145,A -- said -- 63-123047 a number -- JP,1-250944,A, 1-213648, JP,58-10739,B, and British patent 1,425,020th a number -- said -- the 1,476,760th Unless the thing of a publication injures this invention in a number etc., it can use together.

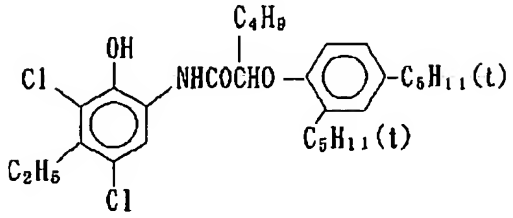
[0086] The compound expressed with a general formula (A) in respect of the effectiveness of this invention is desirable, also when it ****** with a yellow pigmentation coupler and uses, and it shows the general formula of the desirable yellow pigmentation coupler in that case below.

[0087]
[Formula 28]
一般式（Y）

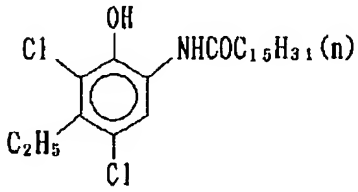


[0088] Ry1 expresses an alkyl group, the permutation amino group, or a heterocycle radical among a formula, Ry2 expresses a halogen atom, an alkoxy group, or an aryloxy group, Ry3 expresses a replaceable radical to the benzene ring, and Xy1 expresses the radical (henceforth a balking radical) from which it can secede by the coupling reaction with a hydrogen atom or an aromatic series primary-amine developing-agent oxidant. k expresses the integer of 0, 1-4. However, when k is two or more, two or more Ry3 may be the same, or may differ. Especially a desirable yellow pigmentation coupler is yellow pigmentation coupler JP,5-2248,A and the Europe patent public presentation 0447969th which are expressed with a general formula (Y) the 18th page left upper column of JP,2-139544,A - given in the 22nd page left lower column. The acyl acetamide system yellow pigmentation coupler which has the description in an acyl group given in a number and JP,5-27389,A, and the Europe patent public presentation 0446863A2nd The yellow pigmentation coupler of a general formula (Cp-2) given in a number is raised. It is desirable also when ******(ing) and using it with the polymer which is the point of the effectiveness of this invention and makes a monomer an acrylic-acid amide and a methacrylic-acid amide when the compound expressed with a general formula (A) ****** with a yellow pigmentation coupler and is used.
[0089] The coupler which emits residue useful in photograph in connection with coupling can also be used by this invention. the DIR coupler which emits a development restrainer -- above-mentioned RD magazine No.17643, the patent indicated by VII - F term, and JP,57-151944,A -- said -- 57-154234 a number -- said -- 60-184248 a number, 63-37346, and U.S. Pat. No. 4,248,962 -- said -- 4,782,012 What was indicated by the number is desirable.
[0090] as the coupler which emits a nucleating agent or an accelerator in the shape of an image at the time of development -- British patent 2,097,140th a number -- said -- 2,131,188 a number and JP,59-157638,A -- said -- 59-170840 A thing given in a number is desirable. in addition, as a coupler which can be used together to the sensitive material of this invention A competition coupler given in U.S. Pat. No. 4,130,427 etc., U.S. Pat. No. 4,283,472, said -- 4,338,393 a number -- said -- 4,310,618 a multi-equivalent coupler given in a number etc. -- JP,60-185950,A -- said -- a DIR redox compound emission coupler given in No. 24252 [Showa 62 to] etc. -- A DIR coupler emission coupler, a DIR coupler emission redox compound, or a DIR redox emission redox compound, the Europe patent 173,302nd -- the coupler which emits the coloring matter which recolors [of No. A] after balking of a publication -- RD magazine -- a bleaching accelerator emission coupler given in No.11449 No., same magazine No.24241 No., JP,61-201247,A, etc. -- A ligand emission coupler given in U.S. Pat. No. 4,553,477 etc., the coupler which emits the leuco coloring matter of a publication to JP,63-75747,A, the coupler which emits the fluorochrome of a publication at U.S. Pat. No. 4,774,181 are mentioned. Next, the example of a typical coupler used for this invention is shown.
[0091]
[Formula 29]

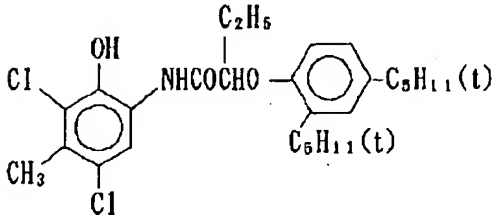
(C－1)



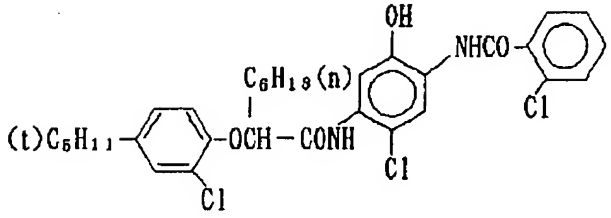
(C－2)



(C－3)

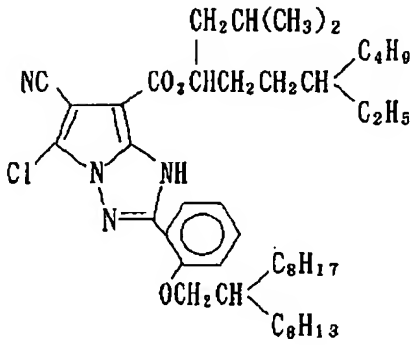


(C－4)

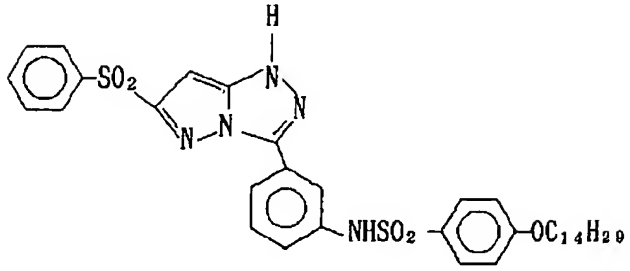


[0092]
[Formula 30]

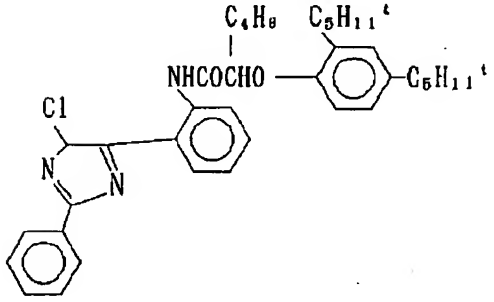
(C－5)



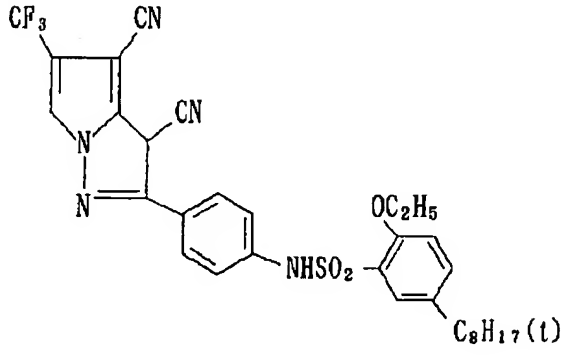
(C－6)



(C－7)

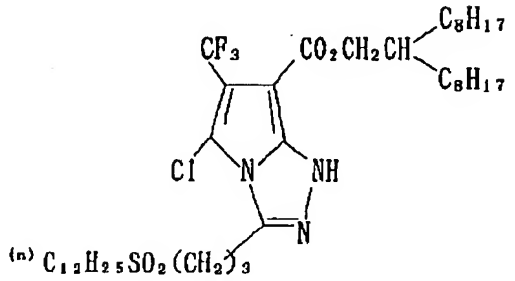


(C－8)

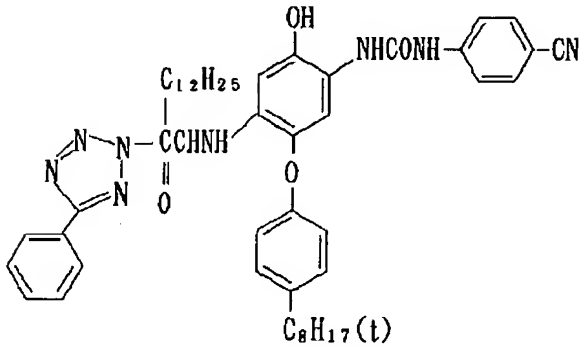


[0093]
[Formula 31]

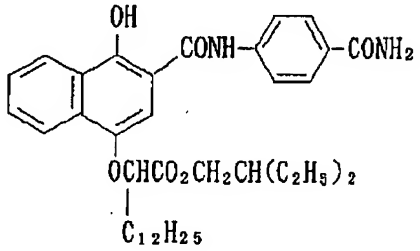
(C－9)



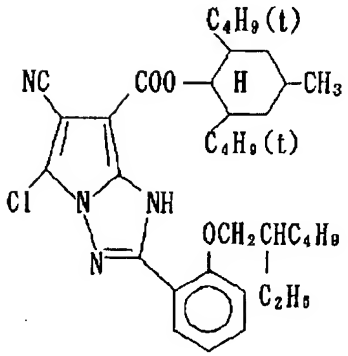
(C－10)



(C－11)

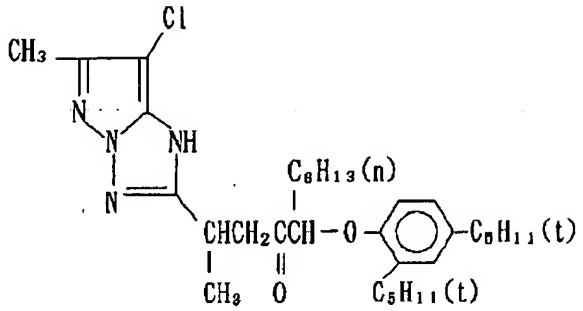


(C－12)

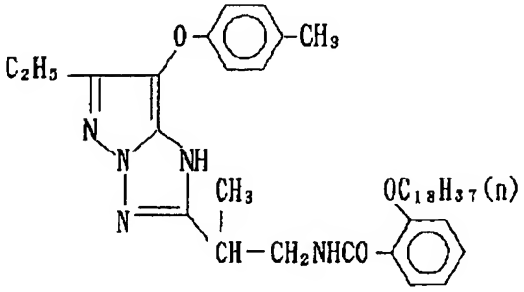


[0094]
[Formula 32]

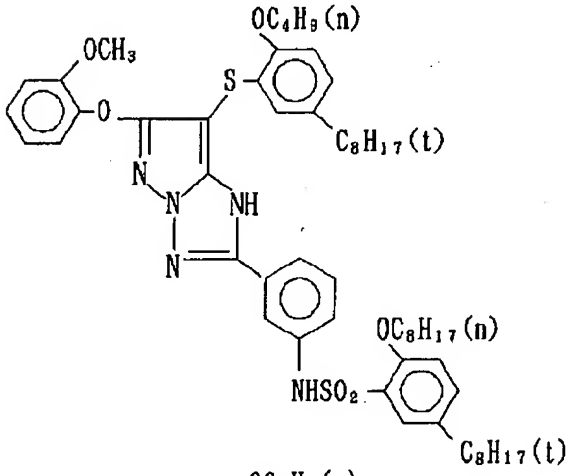
(M－1)



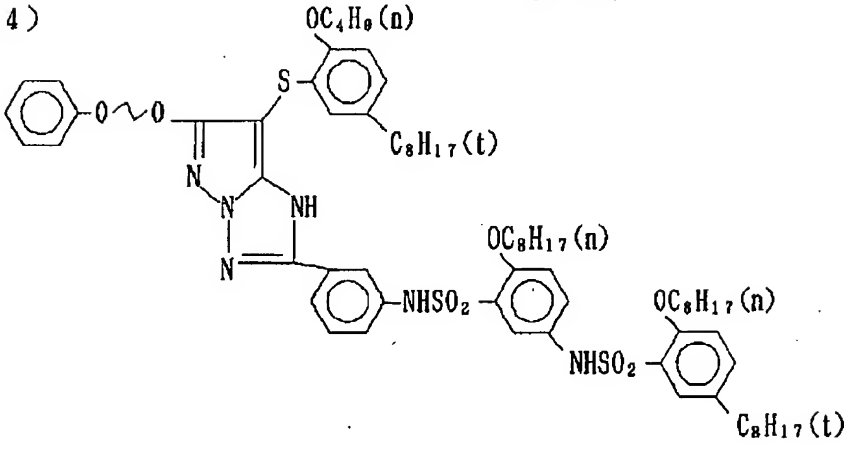
(M－2)



(M－3)

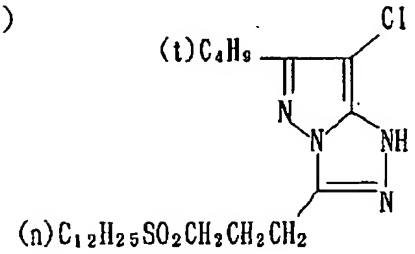


(M－4)

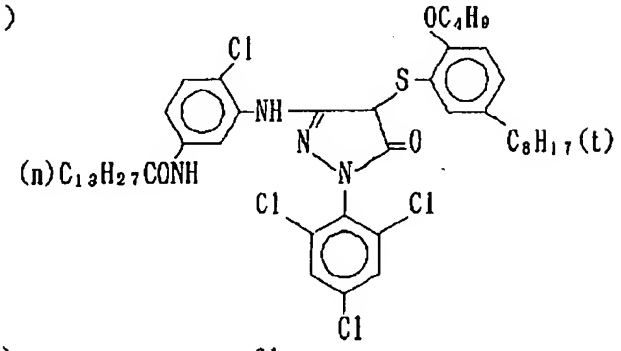


[0095]
[Formula 33]

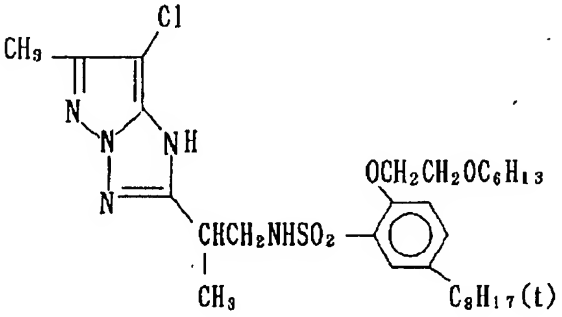
(M－5)



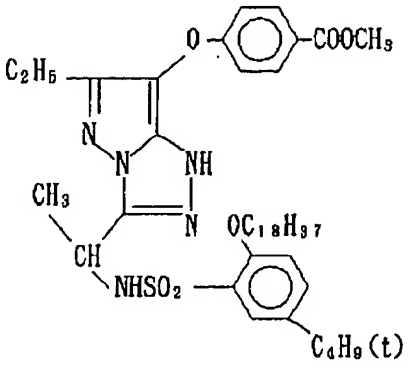
(M－6)



(M－7)

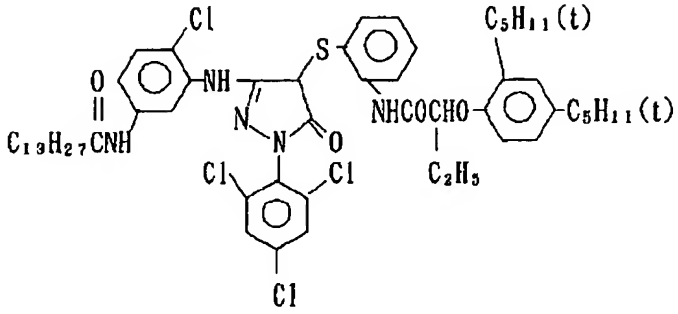


(M－8)

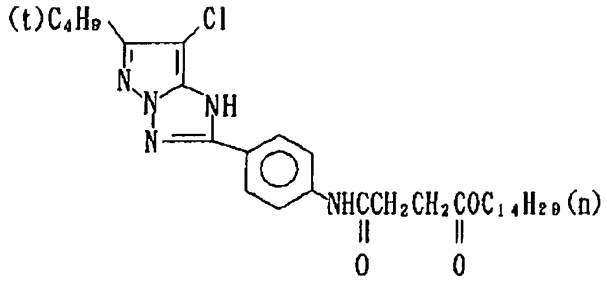


[0096]
[Formula 34]

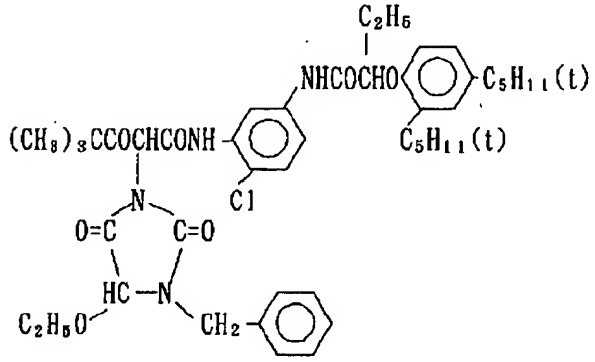
(M－9)



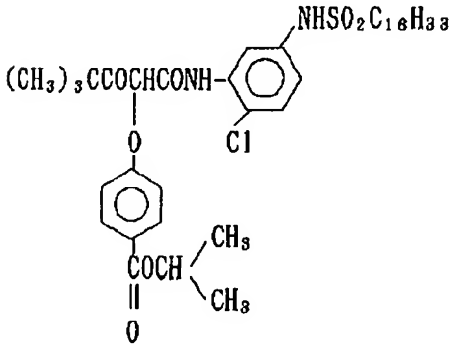
(M－10)



(Y－1)

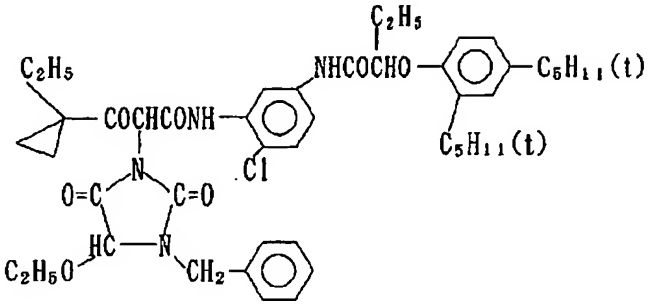


(Y－2)

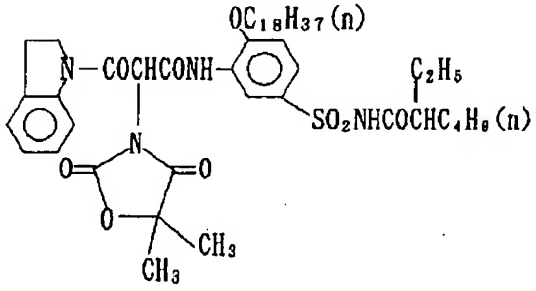


[0097]
[Formula 35]

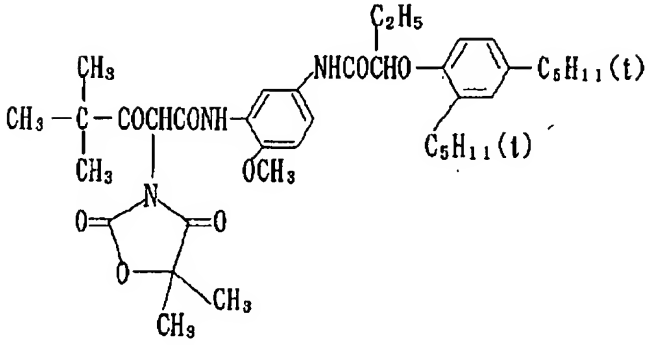
(Y－3)



(Y－4)

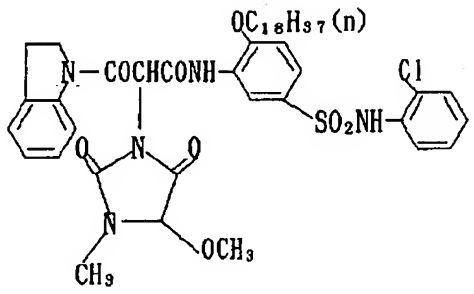


(Y－5)

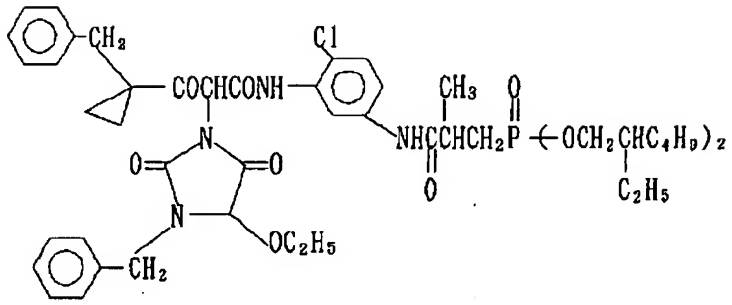


[0098]
[Formula 36]

(Y－6)



(Y－7)



[0099] The range of the standard amount of these color couplers used in this invention that can be used together is 0.001-1 mol per one mol of photosensitive silver halides of the same layer, and it is [at 0.01-0.5 mols and a Magenta pigmentation coupler] 0.002-0.3 mols in a yellow pigmentation coupler preferably in 0.003-0.3 mols and a cyanogen pigmentation coupler.
[0100] Various known fading inhibitors can be used together in the sensitive material of this invention. The ether or the ester derivative which silanized and alkylated hydroquinone, 6-hydroxychroman, 5-hydroxy coumaranes, SUPIRO chromans, p-alkoxy phenols, hindered phenols centering on bisphenols, a gallic-acid derivative, methylene dioxy benzens, aminophenols, hindered amine, and the phenolic hydroxyl group of each [these] compound as cyanogen, a Magenta, and/or an organic fading inhibitor for yellow images is mentioned as an example of representation. Moreover, the metal complex represented by a nickel (bis-salicyl ARUDOKISHIMATO) complex and (bis--N and N-dialkyl dithio cull BAMATO) the nickel complex can be used.
[0101] As an example of an organic fading inhibitor, U.S. Pat. No. 2,360,290, said -- 2,418,613 a number -- said -- 2,700,453 a number -- said -- 2,701,197 a number -- said -- 2,728,659 a number -- said -- 2,732,300 a number -- said -- 2,735,765 a number -- said -- 3,982,944 a number -- said -- 4,430,425 A number and British patent 1,363,921st a number -- U.S. Pat. No. 2,710,801 -- said -- 2,816,028 given in number etc. hydroquinone; -- U.S. Pat. No. 3,432,300 -- said -- 3,573,050 a number -- said -- 3,574,627 a number -- said -- 3,698,909 a number -- 6-hydroxychroman given in said 3,764,337 numbers, JP,52-152225,A, etc. 5-hydroxychroman and SUPIRO in out given in SUPIRO chromans; U.S. Pat. No. 4,360,589; U.S. Pat. No. 2,735,765, British patent 2,066,975th p-alkoxy phenols given in a number, JP,59-10539,A, JP,57-19765,B, etc.; [U.S. Pat. No. 3,700,455,] said -- 4,228,235 a number and JP,52-72224,A -- JP,52-6623,B given in number etc. hindered phenols; -- given in U.S. Pat. No. 3,457,079 gallic-acid derivative; -- given in U.S. Pat. No. 4,332,886 methylene dioxy benzens; -- given in JP,56-21144,B aminophenols; -- the [United States patent] -- 3,336,135 a number -- said -- 4,268,593 A

number and British patent 1,326,889th a number -- said -- 1,354,313 a number -- said -- 1,410,846 a number and JP,51-1420,B -- hindered amine; U.S. Pat. No. 4,050,938 given in JP,58-114036,A, 59-53846, 59-78344, etc. -- said -- 4,241,155 a number and the British patent 2,027,731st -- the metal complex of a publication etc. is mentioned to No. A etc. These compounds can attain the purpose by usually ******(ing) 5 thru/or 100 % of the weight with a coupler to the color coupler which corresponds, respectively, and adding in a sensitization layer.

[0102] The sensitive material of this invention may contain a hydroquinone derivative, an aminophenol derivative, a gallic-acid derivative, an ascorbic-acid derivative, etc. as a color fogging inhibitor. Moreover, in order to prevent the heat of a cyanogen coloring matter image, and degradation especially by light, it is more effective to introduce an ultraviolet ray absorbent into the layer of the both sides which adjoin a cyanogen coloring layer and it. Moreover, it is good for the furthest layer, or the layer or interlayer containing a yellow coupler, in view of a base material.

[0103] The benzotriazol compound permuted by the aryl group as an ultraviolet ray absorbent (for example, thing given in U.S. Pat. No. 3,533,794), 4-thiazolidone compound (for example, U.S. Pat. No. 3,314,794 -- said -- a thing given in 3,352,681 number) -- A benzophenone compound (for example, JP,46-2784,A, the thing of a Europe patent public presentation [No. 521823] publication), a cinnamate compound (for example, U.S. Pat. No. 3,705,805 --) said -- 3,707,395 a thing given in a number, and a butadiene compound (thing given in U.S. Pat. No. 4,045,229) -- a triazine compound (for example, JP,46-3335,A, the thing of a Europe patent public presentation [No. 520938] publication) or a benzoxazole compound (for example, U.S. Pat. No. 3,406,070 -- said -- a thing given in 4,271,307 number) can be used. The coupler (for example, cyanogen pigmentation coupler of an alpha-naphthol system) of ultraviolet absorption nature, the polymer of ultraviolet absorption nature, etc. may be used. Mordanting of these ultraviolet ray absorbents may be carried out to the specific layer. The benzotriazol compound and triazine compound which were permuted by the aforementioned aryl group especially are desirable.

[0104] Moreover, in the sensitive material concerning this invention, it is the Europe patent EP public presentation 0,277,589A2nd in a coupler. It is desirable to use a color image shelf-life amelioration compound like a publication for a number. Concomitant use with an azole system Magenta pigmentation coupler or a cyanogen pigmentation coupler is especially desirable. Namely, a chemical bond is carried out to the aromatic amine system developing agent which remains after color development processing. The Europe patent public presentation 0,277,589A2nd which generates a colorless compound substantially with inactive chemically A chemical bond is carried out to the oxidant of the aromatic amine system color development chief remedy which remains after a compound (A) given in a number, and/or color development processing. The Europe patent public presentation 0,277,589A2nd which generates a colorless compound substantially with inactive chemically A compound (B) given in a number coincidence or using independently For example, it is desirable when preventing the side effect of stain generating and others by the coloring coloring matter generation by the reaction of the residual-among film color development chief remedy in the preservation after processing thru/or its oxidant, and a coupler. Moreover, in order to prevent various kinds of mold and bacteria which it breeds [bacteria] in a hydrophilic colloid layer and degrade an image in the sensitive material concerning this invention, it is desirable to add an antifungal agent like a publication to JP,63-271247,A.

[0105] As a silver halide used for this invention, although a silver chloride, a silver bromide, silver chlorobromide, silver iodochlorobromide, iodine silver bromide, etc. can be used, use of less than [more than 90 mol %100 mol %] and also a more than 95%100 mol % less or equal especially the silver chlorobromide not more than more than 98%100 mol %, or pure chloride emulsion has the desirable silver chloride content which does not contain silver iodide in the purpose of quick processing substantially especially. To the sensitive material concerning this invention, in order to raise the sharpness of an image etc. moreover, in a hydrophilic colloid layer The Europe patent public presentation 0,337,490A2nd To the 27-76th page of a number, a publication, So that optical reflection density [in / for the color (even inside oxo-Norian system color) which can be decolorized by processing / 680nm of sensitive material] may become 0.70 or more add or They are the alcohols (for

example, trimethylolethane (it is desirable to carry out content of the titanium oxide by which surface preparation was carried out in the grade 12% of the weight or more (preferably 14 % of the weight or more).)) of 2 - tetravalence in the waterproof resin layer of a base material.
[0106] Moreover, the base material with which the layer which contains a white polyester system base material or white pigments in a display was prepared as a base material used for the sensitive material concerning this invention on the base material of the side which has a silver halide emulsion layer may be used. Furthermore, in order to improve sharp nature, it is desirable to paint an anti halation layer on the silver halide emulsion layer spreading side of a base material or a rear face. It is desirable to set the transmission density of a base material as the range of 0.35-0.8 so that a display can especially also admire the reflected light or the transmitted light. Even if the sensitive material concerning this invention is exposed by the light, it may be exposed by infrared light. As the exposure approach, low illuminance exposure or high illuminance short-time exposure is sufficient, and, especially in the case of the latter, a laser scan exposure method with the exposure time shorter than 10 to 4 seconds per pixel is desirable. Moreover, it is desirable to use the band of a publication and a stop filter for U.S. Pat. No. 4,880,726 on the occasion of exposure. Optical color mixture is removed by this and color reproduction nature improves remarkably by it.
[0107] As for this invention, it is desirable to apply to the sensitized material with which a developing agent (p phenylenediamine derivative) does not exist in a sensitized material from before a development, for example, it can apply it to a color **-par, a color ******-par, direct positive color sensitive material, a negative color film, a color positive film, a color reversal film, etc. Application to the color sensitive material (for example, direct positive color sensitive material, a color positive film, a color reversal film) which forms the color sensitive material (for example, a color **-par, a color ******-par) which has a reflective base material, and a positive image especially is desirable, and application to the color sensitive material which has a reflective base material especially is desirable.
[0108] the sensitive material according to this invention -- the above-mentioned RD No.17643 28-29 pages -- and -- said -- a development can be carried out by the usual approach indicated in the 615 left columns of No.18716 - the right column. For example, color development down stream processing, desilvering down stream processing, and rinsing down stream processing are performed. In desilvering down stream processing, the bleaching process which used bleach liquor, and bleaching fixing down stream processing using a fixer which used the bleach fix bath instead of the fixing process can also be performed, and bleaching down stream processing, fixing down stream processing, and a bleaching fixing process may be combined in order of arbitration. A stabilization process may be performed instead of rinsing down stream processing, and a stabilization process may be performed after rinsing down stream processing. Moreover, mono-bus down stream processing which used 1 bath development bleaching fixing processing liquid which performs the color development, bleaching, and fixing in 1 bath can also be performed. It may combine with these down stream processing, and front dura mater down stream processing, its neutralization process, halt fixing down stream processing, back dura mater down stream processing, an adjustment process, a intensification process, etc. may be performed. Between above-mentioned processes, a middle rinsing process may be prepared in arbitration. In these processings, the so-called activator down stream processing may be performed instead of color development down stream processing.
[0109] As the approach applied in order to process this sensitized material in the silver halide emulsion applied in this invention, other materials (additive etc.) and photograph configuration layers (layer arrangement etc.), and a list, or an additive for processing, they are JP,4-359249,A, the following patent official report, especially the Europe patent public presentation 0,355,660A2nd. What is indicated by the number is used preferably.
[0110]
[Table 1]

表 1

写真構成要素等	特開昭62－215272号	特開平２-33144号	EPO, 355, 660A2号
ハロゲン化銀乳剤	10頁右上欄６行目～ 12頁左下欄５行目と 12頁右下欄下から４行目～ 13頁左上欄17行目	28頁右上欄16行目～ 29頁右下欄11行目と 30頁２行目～５行目	45頁53行目～47頁３行目、 47頁20行目～22行目
ハロゲン化銀溶剤	12頁左下欄６行目～14行目と 13頁左上欄下から３行目～ 18頁左下欄の末行目	―――	―――
化学増感剤	12頁左下欄下から３行目～ 右下欄下から５行目と 18頁右下欄１行目～ 22頁右上欄下から９行目	29頁右下欄12行目～ 末行目	47頁４行目～９行目
分光増感剤 （分光増感法）	22頁右上欄下から８行目～ 38頁末行目	30頁左上欄１行目～ 13行目	47頁10行目～15行目
乳剤安定剤	39頁左上欄１行目～ 72頁右上欄末行目	30頁左上欄14行目～ 右上欄１行目	47頁10行目～15行目
現像促進剤	72頁左下欄１行目～ 91頁右上欄３行目	―――	―――

[0111]
[Table 2]

表 2

写真構成要素等	特開昭62－215272号	特開平２-33144号	EPO, 355, 660A2号
カラーカプラー （シアン、マゼンタ、 イエローカプラー）	91頁右上欄４行目～ 121頁左上欄６行目	３頁右上欄14行目～ 18頁左上欄末行目と 30頁右上欄６行目～ 35頁右下欄11行目	４頁15行目～27行目、 ５頁30行目～28頁末行目、 45頁29行目～31行目、 47頁23行目～63頁50行目
発色増強剤	121頁左上欄７行目～ 125頁右上欄１行目	―――	―――
紫外線吸収剤	125頁右上欄２行目～ 127頁左下欄末行目	37頁右下欄14行目～ 38頁左上欄11行目	65頁22行目～31行目
退色防止剤 （画像安定化法）	127頁右下欄１行目～ 137頁左下欄８行目	36頁右上欄12行目～ 37頁左上欄19行目	４頁30行目～５頁23行目、 29頁１行目～45頁25行目、 45頁33行目～40行目、 65頁２行目～21行目
高沸点および／または 低沸点有機溶媒	137頁左下欄９行目～ 144頁右上欄末行目	35頁右下欄14行目～ 36頁左上欄下から ４行目	64頁１行目～51行目
写真用添加剤の分散法	144頁左下欄１行目～ 146頁右上欄７行目	27頁右下欄10行目～ 28頁左上欄末行目と 35頁右下欄12行目～ 36頁右上欄７行目	63頁51行目～64頁56行目

[0112]
[Table 3]

表 3

写真構成要素等	特開昭62－215272号	特開平２-33144号	EP0, 355, 660A2号
硬膜剤	146頁右上欄８行目～155頁左下欄４行目	――	――
現像主薬プレカーサー	155頁左下欄５行目～155頁右下欄２行目	――	――
現像抑制剤放出化合物	155頁右下欄３行目～９行目	――	――
支持体	155頁右下欄19行目～156頁左上欄14行目	38頁右上欄18行目～39頁左上欄３行目	66頁29行目～67頁13行目
感材層構成	156頁左上欄15行目～156頁右下欄14行目	28頁右上欄１行目～15行目	45頁41行目～52行目
染料	156頁右下欄15行目～184頁右下欄末行目	38頁左上欄12行目～右上欄７行目	66頁18行目～22行目
混色防止剤	185頁左上欄１行目～188頁右下欄３行目	36頁右上欄８行目～11行目	64頁57行目～65頁１行目
階調調節剤	188頁右下欄４行目～８行目	――	――

[0113]
[Table 4]

表 4

写真構成要素等	特開昭62－215272号	特開平２-33144号	EP0, 355, 660A2号
ステイン防止剤	188頁右下欄９行目～193頁右下欄10行目	37頁左上欄末行目～右下欄13行目	65頁32行目～66頁17行目
界面活性剤	201頁左下欄１行目～210頁右上欄末行目	18頁右上欄１行目～24頁右下欄末行目と27頁左下欄下から10行目～右下欄９行目	――
含弗素化合物（帯電防止剤、塗布助剤、潤滑剤、接着防止剤などとして）	210頁左下欄１行目～222頁左下欄５行目	25頁左上欄１行目～27頁右下欄９行目	――
バインダー（親水性コロイド）	222頁左下欄６行目～225頁左上欄末行目	38頁右上欄８行目～18行目	66頁23行目～28行目
増粘剤	225頁右上欄１行目～227頁右上欄２行目	――	――
帯電防止剤	227頁右上欄３行目～230頁左上欄１行目	――	――

[0114]
[Table 5]

表 5

写真構成要素等	特開昭62－215272号	特開平２-33144号	EPO. 355, 660A2号
ポリマーラテックス	230頁左上欄２行目～239頁末行目	――	――
マット剤	240頁左上欄１行目～240頁右上欄末行目	――	――
写真処理法（処理工程や添加剤など）	３頁右上欄７行目～10頁右上欄５行目	39頁左上欄４行目～42頁左上欄末行目	67頁14行目～69頁28行目

注）特開昭６２－２１５２７２号の引用箇所には、この公報の末尾に掲載された昭和６２年３月１６日付の手続補正書により補正された内容も含む。

また、上記のカラーカプラーのうち、イエローカプラーとしては、特開昭６３－２３１４５１号、同６３－１２３０４７号、同６３－２４１５４７号や特開平１－１７３４９９号、同１－２１３６４８号、同１－２５０９４４号に記載の、いわゆる短波型イエローカプラーを用いるのも好ましい。

[0115]
[Example] Hereafter, although this invention is explained to a detail with an example, this invention is not limited to these.
Example 1 [0116] High-boiling point organic solvent dibutyl phthalate 16.1g was added to yellow pigmentation coupler (Y-1) 16.1g, 24ml of ethyl acetate was added further, it dissolved, and emulsification distribution of this solution was carried out at 200g of 10wt% gelatin water solutions containing 1.5g of sodium dodecylbenzenesulfonate.
[0117] The whole quantity of this emulsification distribution object is added to 247g (70.0g [/kg] silver emulsion and silver-bromide content % of 0.5 mols) of high chloride emulsion, and a spreading silver content is 1.73 g/m2. It applied on the triacetate film base which gave undercoat so that it might become, on this spreading layer, as a protective layer, the gelatin layer was prepared so that desiccation thickness might be set to 1.0micro, and **** 101 was created. In addition, as a gelatin hardening agent, it is 1-oxy-. -3 and 5-dichloro-s-triazine sodium salt was used.
[0118] By the same approach as a sample 101, when making the above-mentioned emulsification distribution object, as shown in the Ath table, it ******(ed) in the combination of a yellow pigmentation coupler (Y-1 and equimolar addition) and the color image stabilizer A (the compound expressed with a general formula (A): indicate an addition all over the Ath table), and the sample was created, except it, it emulsified and applied by the same approach as a sample 101, and samples 102-142 were made.
[0119] The above-mentioned sensitive material was processed at the following process after exposure through the optical wedge.
Down stream processing Temperature Time amount color development 38.5 degrees C 45-second bleaching fixing 35 degrees C A 45-second rinse (1) 35 degrees C A 30-second rinse (2) 35-degree-C 60 seconds (the rinse was made into 3 tank counterflow method from (3) to (1).) 30-second rinse (3) 35 degrees C 30-second desiccation 80 degrees C
[0120] The presentation of each processing liquid is as follows.
[Color developer]
Water 800 ml Ethylenediaminetetraacetic acid 3.0 g 4, 5-dihydroxybenzene -1, 3-disulfon acid disodium salt 0.5 g Triethanolamine 12.0 g Potassium chloride 6.5 g Potassium bromide 0.03g Potassium carbonate 27.0 g Fluorescent brightener (WHITEX 4 Sumitomo Chemical make) 1.0 g Sodium sulfite 0.1 g Disodium-N and N-screw (sulfonate ethyl)

Hydroxylamine 5.0 g Triisopropyl naphthalene (beta) sulfonic-acid sodium 0.1 g N-ethyl-N - (beta-methanesulfon amide ethyl)
- 3-methyl-4-amino aniline -3-/disulfuric acid - One monohydrate 5.0 g Water is added. 1000 ml pH10.00 (it prepares with 25 degrees C / potassium hydroxide, and a sulfuric acid) [0121]
[Bleach fix bath]
Water 600 ml Ammonium thiosulfate (750g/(l.)) 93 ml Ammonium sulfite 40 g Ethylenediaminetetraacetic acid iron (III) ammonium 55 g Ethylenediaminetetraacetic acid 5 g Nitric acid (67%) 30 g Water is added. 1000 ml pH (it prepares with 25 degrees C / acetic acid, and aqueous ammonia) 5.8 [0122]
[Rinse]
Chlorinated-isocyanuric-acid sodium 0.02g Deionized water (5 or less second/cm of conductivity) 1000 ml pH 6.5 [0123] Thus, in each sample in which the coloring matter image was formed, after measuring a spectral extinction spectrum, the Fuji Photo Film ultraviolet absorption filter which cuts light 400nm or less was attached, and exposure was carried out for ten days by xenon circuit tester - (illuminance of 200,000 luxs). Evaluation was performed as a scale of color muddiness with the coloring matter concentration survival rate in the yellow first concentration 2.0 of each sample as ratio =(concentration [of 650nm] / 450nm concentration of neighboring lambdaMax) x100 and the fading prevention effectiveness of cyanogen coloring concentration.
[0124] The Shimazu spectrophotometer and the Fuji **** concentration meter performed measurement. The obtained result is shown in the Ath table.
[0125]
[Table 6]

第A表

試 料	イエローカプラー	色像安定剤 添加量50モル% (対カプラー)	シアン 濃度比 (%)	色素残存率 (%) Xe. 20万Lux, 10日間 初濃度2.0	備 考
101	Y－1	——	1．1%	26%	比較例
102	〃	比較化合物a	5．2	16	〃
103	〃	〃 b	2．6	39	〃
104	〃	〃 c	2．5	38	〃
105	〃	〃 d	3．3	37	〃
106	〃	Cpd－2	5．0	51	〃
107	〃	A－2	1．0	72	本発明
108	〃	A－18	1．1	73	〃
109	〃	A－24	1．0	78	〃
110	〃	A－41	1．0	75	〃
111	〃	A－43	1．0	78	〃
112	〃	A－50	1．2	77	〃
113	〃	A－58	1．1	76	〃
114	〃	A－61	1．1	75	〃
115	Y－3	——	0．9	10	比較例
116	〃	比較化合物a	4．0	12	〃
117	〃	〃 b	2．5	45	〃
118	〃	〃 c	2．4	40	〃
119	〃	〃 d	3．2	45	〃
120	〃	Cpd－2	4．2	55	〃
121	〃	A－3	1．0	70	本発明
122	〃	A－16	1．0	75	〃
123	〃	A－22	0．9	76	〃
124	〃	A－27	0．9	78	〃
125	〃	A－48	1．1	76	〃
126	〃	A－49	1．1	77	〃
127	〃	A－59	1．1	75	〃
128	〃	A－63	1．1	74	〃

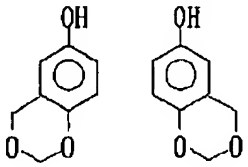
[0126]
[Table 7]

第A表つづき

試 料	イエローカプラー	色像安定剤 添加量50モル%（対カプラー）	シアン 濃度比 （%）	色素残存率（%） Xe, 20万Lux, 10日間 初濃度2.0	備 考
129	Y－6	——	1．0%	8%	比較例
130	〃	比較化合物a	3．9	12	〃
131	〃	〃 b	2．5	45	〃
132	〃	〃 c	3．2	40	〃
133	〃	Cpd－2	4．5	50	〃
134	〃	A－18	1．0	75	本発明
135	〃	A－25	1．0	77	〃
136	〃	A－58	1．1	73	〃
139	Y－7	A－18	1．1	73	〃
140	〃	A－24	1．0	78	〃
141	〃	A－43	1．1	78	〃
142	〃	A－63	1．1	73	〃

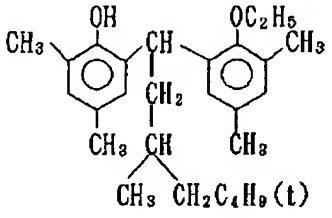
＊ Cpd－2は実施例3に同じ

[0127]
[Formula 37]
比較化合物a



特開平2-15074 号に記載の化合物

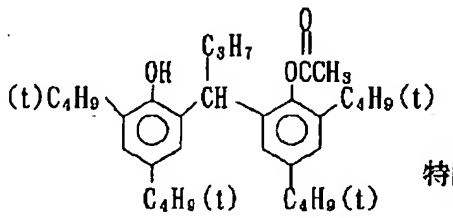
比較化合物b



特開昭62-262047号、米国特許第4,782,011号に記載の化合物

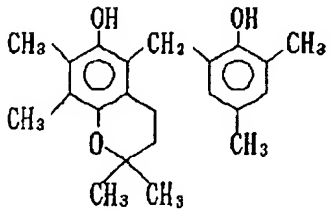
[0128]
[Formula 38]

比較化合物ｃ



特開平1-137258号に記載の化合物

比較化合物ｄ



特開昭53-126号に記載の化合物

[0129] The compound expressed with the general formula (A) of this invention from the Ath table was understood that there is little color muddiness and it is effective in photofading prevention of a color image. Moreover, the technique in which the magnitude of the color muddiness amelioration effectiveness and the robustness amelioration effectiveness is well-known shows not attaching anticipation, either. Moreover, the effectiveness becomes strong further and by adding the compound expressed with a general formula (B) shows excelling, so that there is nothing in ****** if respectively independent.

[0130] The sample 201 was made like the example 1 except having transposed the yellow pigmentation coupler Y-1 of example 2 example 1, and 16.1g to the Magenta pigmentation coupler M-1 and 11.5g, and having transposed high-boiling point organic solvent dibutyl phthalate 16.1g to 11.5g. By the same approach as a sample 201, when making the above-mentioned emulsification distribution object, as shown in the Bth table, it ******(ed) in the combination of a coupler and the color image stabilizers A and B (an addition is indicated all over the Bth table), and the sample was created, and it applied by the same approach as a sample 201, and samples 202-223 were made. Thus, exposure, the development, and the fading test (however, xenon exposure days for 12 days) were performed for each obtained sample like the example 1. Evaluation was performed with the coloring matter concentration survival rate in the first concentration 0.5 and 1.0 of a sample. The obtained result was shown in the Bth table. In addition, the comparison compound is the same as an example 1.

[0131]

[Table 8]

第B表

試料	マゼンタカプラー	色像安定剤A 添加量50モル% 対カプラー	色像安定剤B 添加量100モル% 対カプラー	色素濃度残存率（%） Xe，20万Lux，12日間 初濃度0.5	初濃度1.0	備考
201	M－1	—	—	3%	5%	比較例
202	〃	比較化合物a	—	10	10	〃
203	〃	〃 b	—	15	19	〃
204	〃	〃 c	—	18	19	〃
205	〃	〃 d	—	19	22	〃
206	〃	〃 a	B－19	25	48	〃
207	〃	〃 c	〃	30	54	〃
208	〃	〃 d	〃	28	55	〃
209	〃	A－2	—	55	62	本発明
210	〃	A－22	—	58	62	〃
211	〃	A－43	—	62	68	〃
212	〃	A－48	—	65	69	〃
213	〃	A－2	B－19	68	75	〃
214	〃	A－22	〃	70	73	〃
215	〃	A－43	〃	73	78	〃
216	〃	A－48	〃	75	78	〃
217	M－10	—	—	23	41	比較例
218	〃	比較化合物b	—	28	45	〃
219	〃	〃	B－19	49	55	〃
220	〃	A－18	〃	72	78	本発明
221	〃	A－43	〃	78	82	〃
222	〃	A－58	〃	73	78	〃
223	M－1	A－61	〃	72	76	〃

[0132] The compound of this result to this invention is effective also in photofading prevention of a Magenta color image, especially photofading prevention of a low-density area, and that result showed the fading prevention effectiveness which does not attach anticipation, either from the well-known compound.

[0133] After carrying out corona discharge treatment to the paper support surface which carried out the double-sided lamination with example 3 polyethylene, the gelatin undercoat containing sodium dodecylbenzenesulfonate was prepared and the multilayer color printing paper (sample 001) of lamination which applies further various photograph configuration layers and is shown below was produced. Coating liquid is the following, and was made and prepared.

[0134] Dissolved first pass coating liquid preparation yellow coupler (ExY) 153.0g, 15.0g (Cpd-1) of color image stabilizers, and 16.0g (Cpd-3) of color image stabilizers in 25g (Solv-1) of solvents, 25g (Solv-2) of solvents, and 180 cc of ethyl acetate, 1000g of 10% gelatin water solutions which contain 60 cc of sodium dodecylbenzenesulfonate and 10g of citric acids 10% was made to carry out emulsification distribution of this solution, and the emulsification distribution object A was prepared. on the other hand, the chloro-bromide emulsion A (fluctuation of 3:7 mixture (silver mole ratio) grain-size distribution with the large size emulsion A with a cube and an average grain size of 0.88 micrometers and the 0.70-micrometer small size emulsion A -- counting made a part of particle front face which uses 0.3 mol % of silver bromides as a base also with 0.08, 0.10, and each size emulsion station-agent-contain a silver chloride, respectively) was prepared. To the large size emulsion A, 2.5xten - four mols of blue sensitivity sensitizing dye A and B shown in this emulsion below are added to 2.0x10-mol -four

mols and the small size emulsion A, respectively per one mol of silver. Moreover, chemical ripening of this emulsion added the sulfur sensitization agent and the gold sensitization agent, and was performed. The mixed dissolution of the aforementioned emulsification distribution object A and this aforementioned chloro-bromide emulsion A was carried out, and first pass coating liquid was prepared so that it might become the presentation shown below. In addition, emulsion coverage shows silver content conversion coverage.

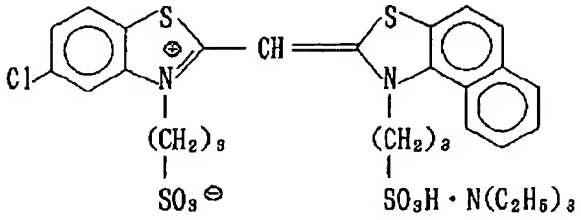
[0135] The coating liquid of the second layer to the seventh layer was also prepared by the same approach as first pass coating liquid. As a gelatin curing agent of each class, it is 1-oxy-. - 3 and 5-dichloro-s-triazine sodium salt was used. Moreover, the whole quantity is Cpd-14 and Cpd-15 to each class, respectively 25.0 mg/m2 50 mg/m2 It added so that it might become. The following spectral sensitization coloring matter was used for the chloro-bromide emulsion of each photosensitive emulsion layer, respectively.

[Blue sensitivity emulsion layer]

[0136]

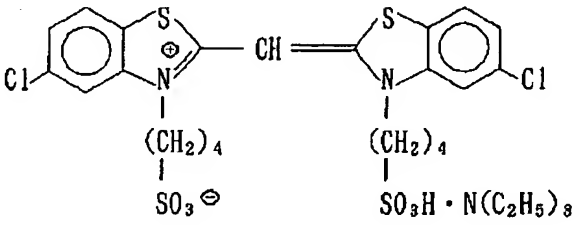
[Formula 39]

増感色素A



および

増感色素B



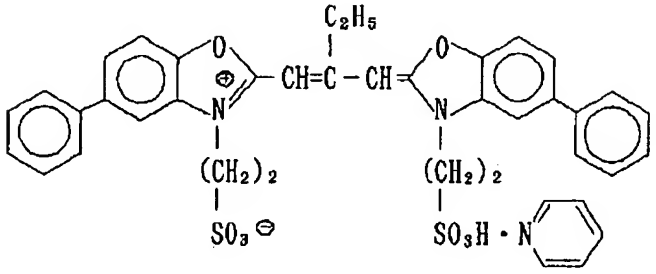
[0137] (Per one mol of silver halides, and to a large size emulsion, it is [as opposed to / respectively / 2.0xten - four mols, and a small size emulsion] 2.5xten - four mols respectively)

[Green sensibility emulsion layer]

[0138]

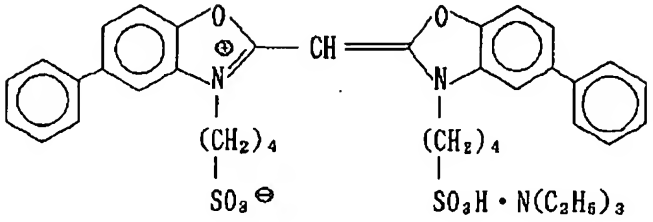
[Formula 40]

増感色素C

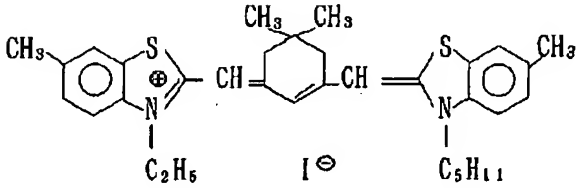


[0139] (Per one mol of silver halides, and to a large size emulsion, it is 5.6xten - four mols to 4.0xten - four mols, and a small size emulsion)

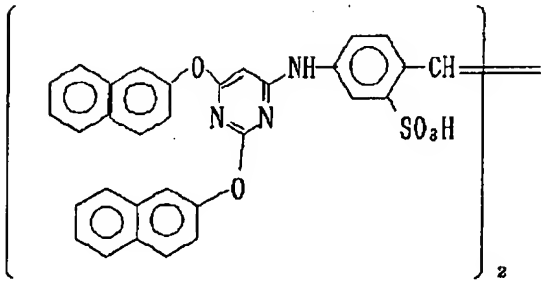
[0140]
[Formula 41]
増感色素D



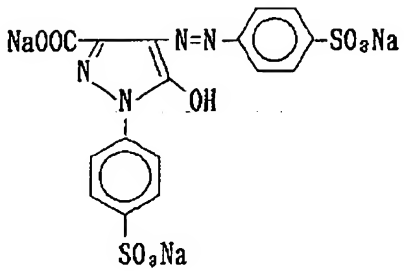
[0141] (Per one mol of silver halides, and to a large size emulsion, it is 1.0xten - four mols to 7.0xten - five mols, and a small size emulsion)
[Red sensitivity emulsion layer]
[0142]
[Formula 42]
増感色素E



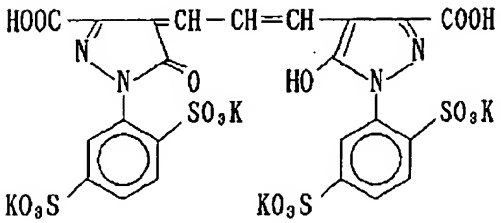
[0143] (Per one mol of silver halides, and to a large size emulsion, it is 1.1xten - four mols to 0.9xten - four mols, and a small size emulsion)
Furthermore, to the red sensitivity emulsion layer, the 2.6xten - three mols per one mol of silver halides of the following compound F were added.
[0144]
[Formula 43]
化合物F



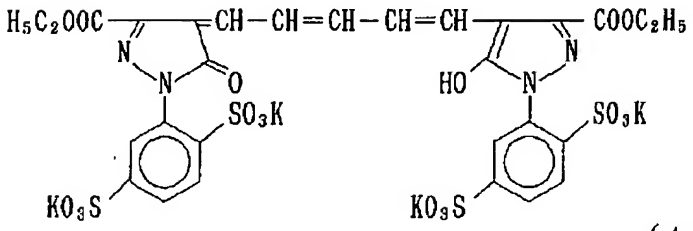
[0145] moreover, a blue sensitivity emulsion layer, a green sensibility emulsion layer, and a red sensitivity emulsion layer -- receiving -- 1-(5-methyl ureido phenyl)-5-mercapto tetrazole -- respectively -- 8.5xten - five mols per one mol of silver halides, and 7.7x10-4 -- 2.5xten - four mols added. Moreover, it is 4-hydroxy-6-methyl to a blue sensitivity emulsion layer and a green sensibility emulsion layer. - 1, 1, 3a, and 2xten - four mols of 7-TETORAZA indenes were added with 1xten - four mols per one mol of silver halides, respectively. Moreover, the following color (the inside of a parenthesis expresses coverage) was added to the emulsion layer for irradiation prevention.
[0146]
[Formula 44]



(10mg/m²)

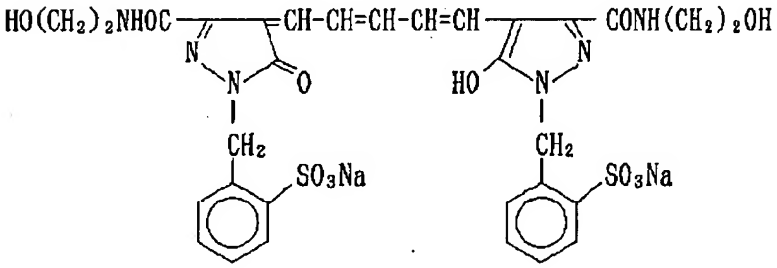


(10mg/m²)



(40mg/m²)

および

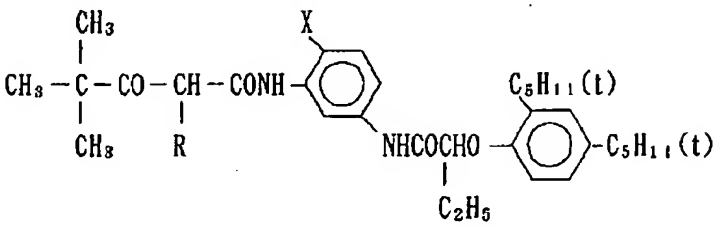


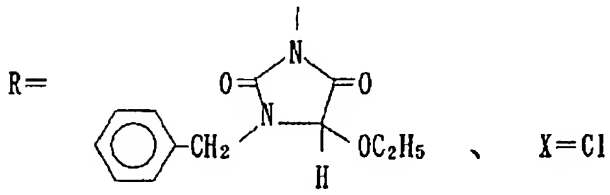
(20mg/m²)

[0147] (Lamination) The presentation of each class is shown below. A figure expresses coverage (g / m2). A silver halide emulsion expresses silver conversion coverage.
White pigments (TiO2) and a blueness color (ultramarine blue) are included in the polyethylene by the side of the base material polyethylene laminated-paper [first pass.]
[0148]
First pass (blue sensitivity emulsion layer)
The aforementioned chloro-bromide emulsion A 0.27 Gelatin 1.36 Yellow coupler (ExY) 0.79 Color image stabilizer (Cpd-1) 0.08 Color image stabilizer (Cpd-3) 0.08 Solvent (Solv-1) 0.13 a solvent (Solv-2) 0.13 -- the second layer (color mixture prevention layer)
Gelatin 1.00 Color mixture inhibitor (Cpd-4) 0.06 Solvent (Solv-7) 0.03 Solvent (Solv-2) 0.25 Solvent

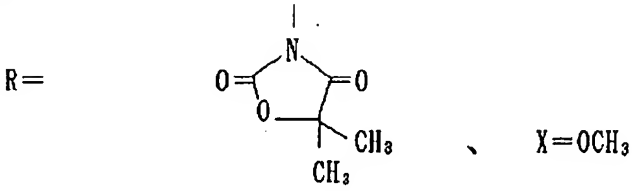
(Solv-3) 0.25 [0149]
The third layer (green sensibility emulsion layer)
Chloro-bromide emulsion (a cube, 1:3 mixture of the large size emulsion B with an average grain size of 0.55 micrometers and the 0.39-micrometer small size emulsion B (Ag mole ratio).) The coefficient of variation of grain-size distribution made a part of particle front face which uses a silver chloride as a base also with 0.10, 0.08, and each size emulsion carry out localization content of the AgBr0.8 mol %, respectively.
0.13 Gelatin 1.45 Magenta coupler (ExM) 0.16 Color image stabilizer (Cpd-5) 0.15 Color image stabilizer (Cpd-2) 0.03 Color image stabilizer (Cpd-6) 0.01 Color image stabilizer (Cpd-7) 0.01 Color image stabilizer (Cpd-8) 0.08 Solvent (Solv-3) 0.50 Solvent (Solv-4) 0.15 Solvent (Solv-5) The 0.15 fourth layer (color mixture prevention layer)
Gelatin 0.70 Color mixture inhibitor 0.04 Solvent (Solv-7) 0.02 Solvent (Solv-2) 0.18 Solvent (Solv-3) 0.18 [0150]
The fifth layer (red sensitivity emulsion layer)
Chloro-bromide emulsion (a cube, 1:4 mixture of the large size emulsion C with an average grain size of 0.50 micrometers and the 0.41-micrometer small size emulsion C (Ag mole ratio).) A part of particle front face which uses a silver chloride as a base for AgBr0.8 mol % also with 0.09, 0.11, and each size emulsion was made to carry out localization content of the coefficient of variation of grain-size distribution, respectively.
0.20 Gelatin 0.85 Cyan coupler (ExC) 0.33 Ultraviolet ray absorbent (UV-2) 0.18 Color image stabilizer (Cpd-1) 0.33 Color image stabilizer (Cpd-6) 0.01 Color image stabilizer (Cpd-8) 0.01 Color image stabilizer (Cpd-11) 0.01 Solvent (Solv-6) 0.22 Color image stabilizer (Cpd-9) 0.01 Color image stabilizer (Cpd-10) 0.01 Solvent (Solv-1) The 0.01 sixth layer (ultraviolet absorption layer)
Gelatin 0.55 Ultraviolet ray absorbent (UV-1) 0.38 Color image stabilizer (Cpd-12) 0.15 Color image stabilizer (Cpd-5) The 0.02 seventh layer (protective layer)
Gelatin 1.13 Acrylic denaturation copolymer of polyvinyl alcohol (whenever [denaturation] 17%) 0.05 Liquid Paraffin 0.02 Color Image Stabilizer (Cpd-13) 0.01 [0151]
[Formula 45]

（ＥｘＹ）イエローカプラー



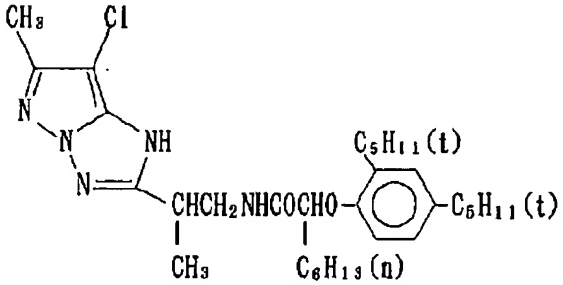


と



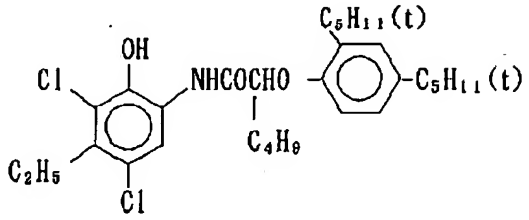
との１：１混合物（モル比）

（ＥｘＭ）マゼンタカプラー

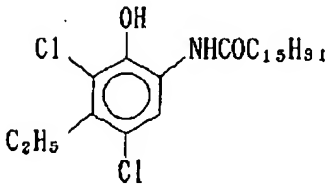


[0152]
[Formula 46]

（ＥｘＣ）シアンカプラー

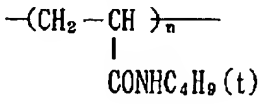


と



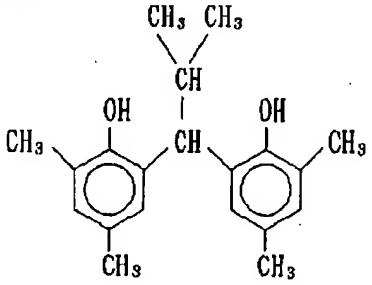
との３：７混合物（モル比）

（Ｃｐｄ－１）色像安定剤



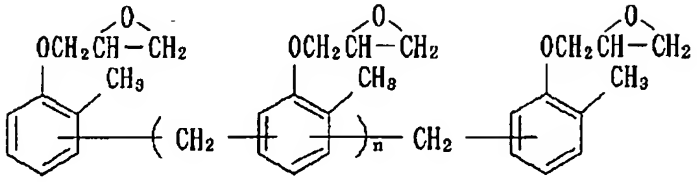
平均分子量　６０，０００

（Ｃｐｄ－２）色像安定剤



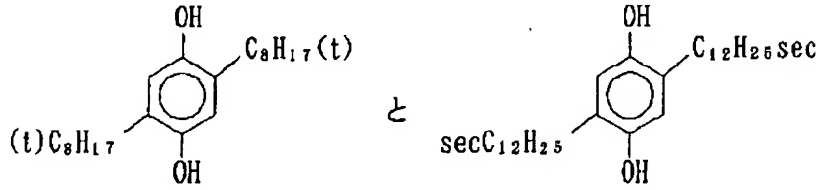
[0153]
[Formula 47]

（Ｃｐｄ－３）色像安定剤



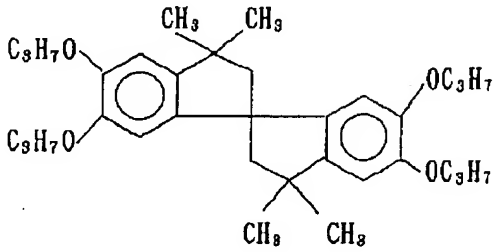
ｎ＝７～８（平均値）

（Ｃｐｄ－４）混色防止剤

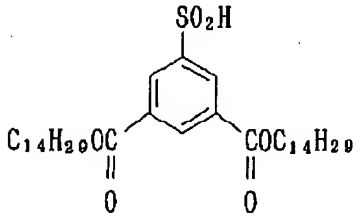


の１：１の混合物（モル比）

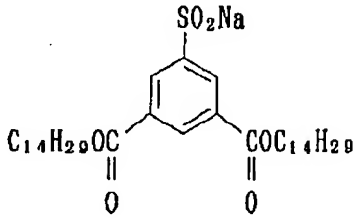
（Ｃｐｄ－５）色像安定剤



（Ｃｐｄ－６）色像安定剤

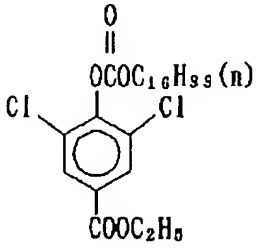


（Ｃｐｄ－７）色像安定剤

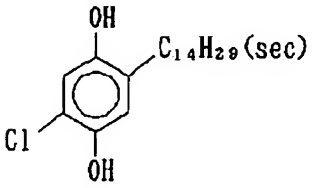


[0154]
[Formula 48]

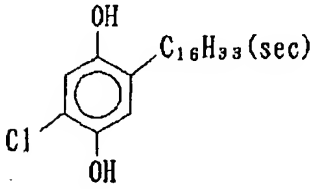
（Ｃｐｄ－８）色像安定剤



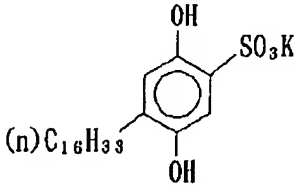
（Ｃｐｄ－９）色像安定剤



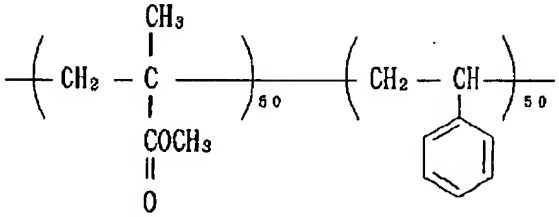
（Ｃｐｄ－１０）色像安定剤



（Ｃｐｄ－１１）色像安定剤

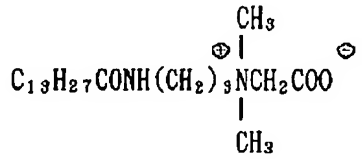


（Ｃｐｄ－１２）色像安定剤



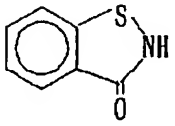
平均分子量　６０，０００

（Ｃｐｄ－１３）色像安定剤

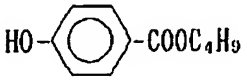


[0155]
[Formula 49]

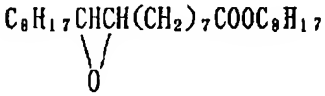
（Ｃｐｄ－１４）防腐剤



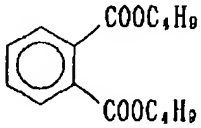
（Ｃｐｄ－１５）防腐剤



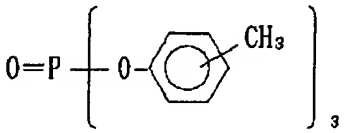
（Ｓｏｌｖ－１）溶 媒



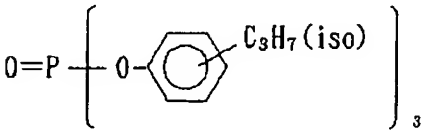
（Ｓｏｌｖ－２）溶 媒



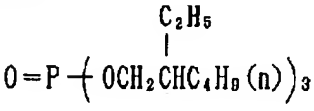
（Ｓｏｌｖ－３）溶 媒



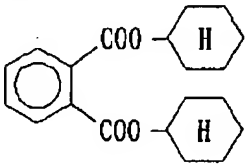
（Ｓｏｌｖ－４）溶 媒



（Ｓｏｌｖ－５）溶 媒

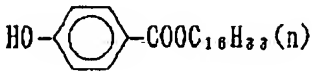


（Ｓｏｌｖ－６）溶 媒

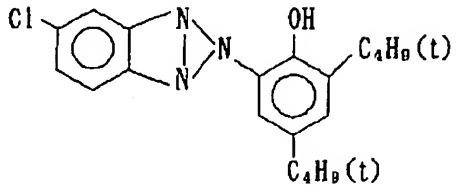


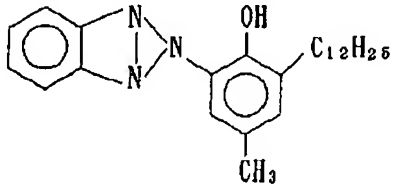
[0156]
[Formula 50]

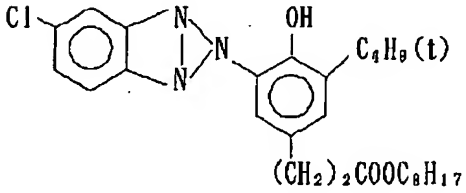
（Ｓｏｌｖ－７）溶　媒

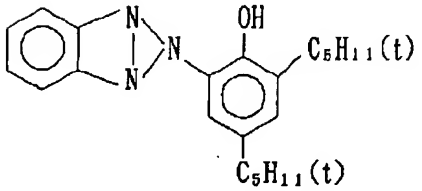


（ＵＶ－１）紫外線吸収剤







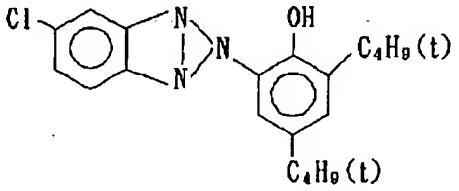


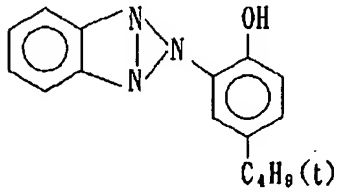
の１：５：１０：５の混合物（重量比）

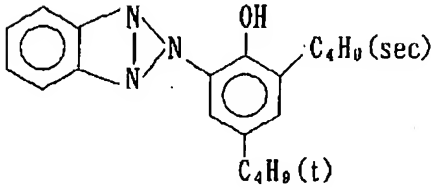
[0157]

[Formula 51]

（ＵＶ－２）紫外線吸収剤







の１：２：２の混合物（重量比）

[0158] Next, other samples 002-010 as well as a sample 001 were produced except having ******(ed) to the sample 001, combining the first yellow pigmentation coupler ExY and color image stabilizers A and B (1 color image stabilizer Cpd- three ******), as shown in the Cth table. the addition of a coupler -- ExY and equimolar replacement -- carrying out -- the color image stabilizers A and B -- a yellow coupler -- receiving -- respectively -- 20-mol % -- it added. In addition, the comparison compound is the same as an example 1.

[0159] First, the photographic sensitometer (the Fuji Photo Film Co., Ltd. make, a FWH mold, color temperature of 3200 degrees K of the light source) was used for the sample 001, and exposure of gray by which about 30% of a spreading silver content is developed was given. The liquid of the following down stream processing and a processing liquid presentation was used for the sample which exposure ended using the paper processing machine, consecutive processing was carried out, and the development condition of running equilibrium was produced.

[0160]

Down stream processing Temperature Time amount Amount of supplements * Color development 38.5 degrees C 45 seconds 73ml Bleaching fixing 35 degrees C 45 seconds 60ml** Rinse (1) 35 degrees C 30 seconds - Rinse (2) 35 degrees C 30 seconds - Rinse (3) -- 35 degrees C 30 seconds 360ml desiccation 80 degrees C 60 second * Sensitive-material 1m2 per -- amount of supplements ** the above-mentioned 60ml -- in addition, 120ml per two was slushed 1m of sightseeing ingredients from the rinse (1).

(The rinse was made into 3 tank counterflow method from (3) to (1))

The presentation of each processing liquid is as follows.

[0161]

(Color developer) Tank liquid Replenisher Water 800ml 800ml Ethylenediamine -4 acetic acid 3.0 g

3.0g 4, 5-dihydroxybenzene - 1 Three - disulfon acid disodium salt 0.5 g 0.5g Triethanolamine 12.0 g 12.0g Potassium chloride 6.5 g - 0.03g of potassium bromides - Potassium carbonate 27.0 g 27.0g Fluorescent brightener (WHITEX 4, Sumitomo Chemical make) 1.0 g 3.0g Sodium sulfite 0.1 g 0.1g Disodium-N and N-screw (sulfonate ethyl) hydroxylamine 5.0 g 10.0g Triisopropyl naphthalene (beta) sulfone Acid sodium 0.1 g 0.1g N-ethyl-N-(beta-methane SURUHONA MIDOECHIRU)-3-methyl-4-amino Aniline sulfate .1 monohydrate 5.0 g11.5g Water is added. 1000 ml 1000ml pH (it prepares with 25 degrees C / potassium hydroxide, and a sulfuric acid) 10.00 11.00 [0162]
(Bleach fix bath) Tank liquid Replenisher Water 600ml 150ml Ammonium thiosulfate (750g/(l.)) 93ml 230ml Ammonium sulfite 40g 100g Ethylenediaminetetraacetic acid iron (III) ammonium 55g 135g Ethylenediaminetetraacetic acid 5g 12.5g Nitric acid (67%) 30g 65g Water is added. 1000ml 1000ml pH (it prepares with 25 degrees C / acetic acid, and aqueous ammonia) 5.85.6 (a replenisher is the same as tank liquid) (rinse)
Chlorinated-isocyanuric-acid sodium 0.02g Deionized water (5 or less second/cm of conductivity) 1000ml pH 6.5 [0163] Next, image Mr. exposure was performed using the optical wedge of 3 color separations in samples 001-010, and it processed using the above-mentioned processing liquid. Thus, the fading test of each sample in which the coloring matter image was formed was performed. Evaluation of the fading prevention effectiveness searched for the yellow coloring matter concentration survival rate in the first concentration 2.0 after exposure for ten days by xenon circuit tester - (illuminance of 200,000 luxs). The obtained result is shown in the Cth table.
[0164]
[Table 9]

第C表

試料	カプラー	色像安定剤A 添加量20モル% 対カプラー	色像安定剤B 添加量20モル% 対カプラー	イエロー濃度残存率（%） Xe，20万Lux，10日間 初濃度2.0	備考
001	ExY	—	—	22	比較例
002	〃	比較化合物b	—	42	〃
003	〃	〃	B-19	48	〃
004	〃	A-43	—	68	本発明
005	〃	〃	B-19	75	〃
006	Y-7	—	—	20	比較例
007	〃	比較化合物b	—	41	〃
008	〃	〃	B-19	50	〃
009	〃	A-48	—	70	本発明
010	〃	〃	B-19	78	〃

[0165] The result of the Cth table shows that the compound of this invention shows the fading prevention effectiveness excellent also in the sensitized material of a multilayer configuration.
[0166] In the sample 401 of the example 4 given in example 4 JP,4-359249,A Or (Y-7) it replaces. the coupler of the 15th layer, the 16th layer, and the 17th layer -- a coupler (Y-3) -- Moreover, it ******(ed) and added to the coupler of each layer in the compound (A-2) of 25-mol % of this invention, (A-18), (A-24), or (A-41) (A-43) each layer, and others prepared the sample as well as a sample 401. Like the processing 12 of the example 6 given [these samples] in JP,4-359249,A, exposure and when it carried out the development and the fading test was carried out, each sample of this invention showed the outstanding robustness, and its photograph property was also good. It turned out that the compound of this invention shows the effectiveness excellent also in this sensitive material.
[0167] In the color photography sensitive material of the example 2 given in example 5 JP,1-158431,A Or (Y-7) it replaces. the coupler of the 11th layer and the 12th layer -- the coupler (Y-3) of this invention -- Instead of Cpd-9 of each layer, moreover, the compound of this invention (A-3), a mol [9 / (A-16), (A-22) / Cpd-] -- replacing, others prepared the sample like the color photography sensitive

material of the example 2 of a publication to JP,1-158431,A. Like the example 2 given [these samples] in JP,1-158431,A, exposure and when it carried out the development and the fading test and the photograph property were investigated, each sample of this invention showed the outstanding robustness, and its photograph property was also good. It turned out that the compound of this invention shows the effectiveness excellent also in this sensitive-material system.

[0168]

[Effect of the Invention] The color picture which was excellent in color enhancement and was excellent in robustness with operation of this invention can be formed.

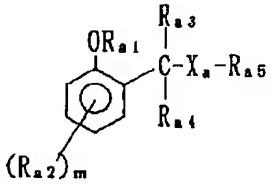
[Translation done.]

* NOTICES *

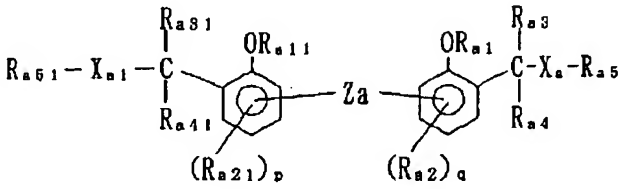
1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

CLAIMS

[Claim(s)]
[Claim 1] the silver halide color photography sensitive material characterized by the thing of the compound which it is [on a base material] further alike at least, and is expressed with the following general formula (A) for which a kind is contained at least.
[Formula 1]
一般式（A）

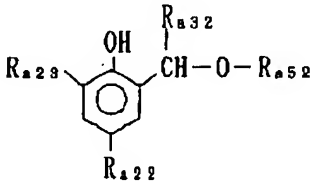


(Ra1 expresses a hydrogen atom, an aliphatic series radical, an acyl group, aliphatic series, or an aryl sulfonyl group among a formula.) Ra2 expresses a hydrogen atom or a substituent. Ra3 and Ra4 may be the same, or you may differ, and a hydrogen atom, an aliphatic series radical, or an aryl group is expressed, and Ra5 expresses an aliphatic series radical, an aryl group, an acyl group, aliphatic series or an aryloxy carbonyl group, a carbamoyl group, aliphatic series, an aryl sulfonyl group, or a sulfamoyl group, respectively. Xa Express a ****** atom or a sulfur atom. m expressed the integer of 1-4, and two or more Ra2 when m is two or more may be the same, or could differ, and when two or more Ra2 or more by two has m in each-other ortho position, it may be combined mutually. However, Ra1 and Ra5 are not combined mutually.
[Claim 2] Silver halide color photography sensitive material according to claim 1 characterized by the compound expressed with a general formula (A) being a compound expressed with the following general formula (A-I).
[Formula 2]
一般式（A－I）

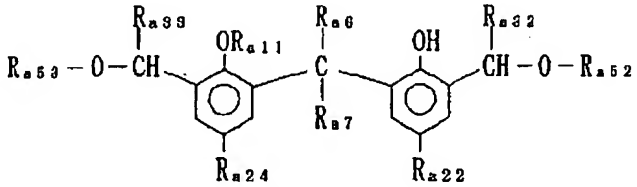


(Ra1, Ra2, Ra3, Ra4, Ra5, and Xa are the same as what the general formula (A) defined among a formula, and Ra11, Ra21, Ra31, Ra41, Ra51, and Xa1 are the same as what Ra1, Ra2, Ra3, Ra4, Ra5, and Xa defined, respectively.) Za Expressing oxygen atom, sulfur atom, or -C(Ra6) (Ra7)-, p and q express the integer of 1-3. Ra6 and Ra7 may be the same, or they may differ from each other, and express a hydrogen atom, an aliphatic series radical, or an aryl group, respectively. Two or more Ra2 or Ra21 when p or q is two or more It may be the same or you may differ. Ra2 or Ra21 of plurality [q / p or / two / or more] When it is in each-other ortho position, you may join together mutually. However,

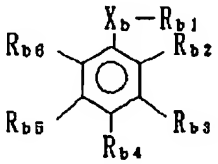
Ra1, and Ra5 and Ra11 Ra51 It does not join together mutually.
[Claim 3] Silver halide color photography sensitive material according to claim 1 characterized by the compound expressed with a general formula (A) being a compound expressed with the following general formula (A-II).
[Formula 3]
一般式（A－II）



(Ra32 and Ra52 are synonymous with Ra3 and Ra5 in a general formula (A) respectively among a formula.) Ra22 And Ra23 It may be the same, or you may differ and it is synonymous with Ra2 in a general formula (A) respectively.
[Claim 4] Silver halide color photography sensitive material according to claim 1 characterized by the compound expressed with a general formula (A) being a compound expressed with the following general formula (A-III).
[Formula 4]
一般式（A－III）



(Ra11 is synonymous with Ra1 which the general formula (A) defined among a formula.) Ra32 And Ra33 It may be the same, or you may differ and it is synonymous with Ra3 in a general formula (A) respectively. Ra52 And Ra53 It may be the same, or you may differ and it is synonymous with Ra5 in a general formula (A) respectively. Ra22 And Ra24 It may be the same, or you may differ and it is synonymous with Ra2 in a general formula (A) respectively. Ra6 and Ra7 may be the same, or they may differ from each other, and express a hydrogen atom, an aliphatic series radical, or an aryl group, respectively. However, Ra11 Ra53 It does not join together mutually.
[Claim 5] Silver halide color photography sensitive material according to claim 1, 2, 3, or 4 characterized by using further the compound expressed with the following general formula (B) in the same layer.
[Formula 5]
一般式（B）



(Rb1 expresses an aliphatic series radical or a heterocycle radical among a formula.) even if Rb2, Rb3, Rb4, Rb5, and Rb6 are the same -- you may differ -- respectively -- a hydrogen atom, an aliphatic series radical, aliphatic series or an aryl acyl group, aliphatic series or an aryl acylamino radical, aliphatic series or an aryloxy carbonyl group, a halogen atom, aliphatic series or an ant-RUSURUHONIRU radical, a carbamoyl group, a sulfamoyl group, or -Xb -- '-Rb1' It expresses. Xb And Xb' expresses -O-, -S-, or -N(Rb7)-, respectively. - Xb-Rb1 and the radical which is in the ortho position mutually among Rb2, Rb3, Rb4, Rb5, and Rb6 may join together, five to 8 membered-ring may be formed, and it is Rb1, Rb7, or Rb1'. Rb7 may join together mutually and may form five to 7 membered-ring. Rb1' And Rb7 is

synonymous with Rb1. at least one [however,] of Rb2-the Rb6 -Xb -- '-Rb1' it is .

[Translation done.]